

United States Department of Agriculture

FIELD DIARY

Utah

July 15- Oct. 19.
1914.

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INSTRUCTIONS.

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This diary will be retained by the official preparing same, but will be subject to call by the administrative officers of the Department, including the disbursing officer, at any time.

When this book is filled another may be secured by application to the chief of your Bureau or to the disbursing officer of the Department.

James Wilson

Secretary of Agriculture.

7/15

Coot 4 days old. Top of head almost bare except for two lines of black hairs in the central region. tip of bill black egg tooth present white, rest of bill rather dull waxy and lighter towards tip. claw present on 1st phalanx. frontal plate developed. note. Kew Kew Kew feet large strong well lobed dusky tinged with lighter

- Annet
- Black-necked Stilt KK KX (test-e)
- Great Blue Heron quack quack.
- Yellowlegs.
- Coot (Kew)
- Cinnamon Teal
- Marsh Wren song - harper
- Yellow head
- Odor

X Snails floating with foot exposed to surface film. Would not sink otherwise. Same in bottom.

- Calif. Gull
- Red-head
- Zebra Kaka Kaka. Teac.
- Night Heron
- Killdeer
- Pelican

Externally gathered material

Gastrophilus

July 15

Married american

Found at edge of channel
where it had climbed up onto the
raised edge of marsh. Was alert
but quite helpless. eyes normal
filmage worn. Had some use
of wings but used them mainly
to help along. could not support
weight of body on feet when I
held it in one hand & placed
the feet in the other trying to balance
it. Tail muscles functional
in moving pushed itself along
with feet by frequent flapping
wings. Could hold head up &
move it but muscles were
weak. anus a mass of maggots
heart beat violently when captured
when eyelids were loosened were
found to be partly paralyzed
with watery secretion. Metabolizing
membrane could be kept
forward half an inch & up &
down slightly but not
away and no further.

molting all over. old plumage
very worn fat on breast plumage
moderate, greasy. feathers of belly
foul from dung.

subventral gland rather dry
was out in sight. On cross section
flesh with an orange yellow opaque
subventral glands. They appeared
extremely galled and inflamed.

areas, like skin. I noticed
that the bulk of the trachea
lay to the left of the right
side trachea. The right
side trachea was not
but the left one was. The
trachea was attached firmly
to the bulbosity and was spread
out, broad & enlarged. The whole
left muscle was noticeably
smaller than the right.
The skin was not shiny, somewhat
dry.

Much fat in body cavity
in heart, stomach & about
anal region.

Testis shrunken
cloaca filled with a green ^{white}
and which showed some
smaller matter.

Small bladder large distended
very dark green.

Spleen small triangular
rather unhealthy blotched red in
places.

Stomach only almost black.
Stomach was not empty contained
much sand, seeds of molluscs
& algae. Sand present in faeces
matter present whole length
of intestine. frothy & full of bubbles
in small intestine for first
part. latterly a mucus
in lumen.

Seal. July 15

Found in water at edge of
bank unable to ascend. I with Indian
chloroform greenish in color, with
homogenous matter present, somewhat
could spread wings. Laterally a
little but had no control over them
when caught on a wood or branch
could only struggle. Was unable
to descend them. It could not support
body ~~upright~~ but propped
slowly & painfully by moving
forward in a squat. Upper & lower
side quivered to eyeball the lower
one half covering the ball.

Could not move eyeball &
reticulating membrane functional.
When held in the air, spread feet
rapidly but had little strength
in them. neck muscles long

July 12

- Barn Swallow
- Blue Jay
- Cuckoo
- Goldfinch
- House Sparrow
- Kingbird
- Lark
- Meadowlark
- Mockingbird
- Nighthawk
- Oriole
- Pigeon
- Redstart
- Robin
- Song Sparrow
- Towhee
- Vireo
- Woodpecker
- Yellow Warbler
- Zebra Finch

July 16

- Cowbird
- Solitary Sandpiper
- Magpie
- Empidonax
- Horned Yellowthroat
- English Sparrow
- Song Sparrow
- Killdeer
- Yellow head
- Bank Swallow
- Crow
- Night Heron
- Great Blue " - - - - - than fly - ground - me
- Dove
- Pine Siskin
- Marsh Wren - - - - - 2 - - - - - not
- Common Loon
- Black Tern
- - - - -
- Gull
- Red-wing
- Tern
- Mallard
- Pelican
- Lesser Yellowlegs
- Avocet & Kish Kish - - - - -
- Osprey
- Red-tail - - - - -
- - - - -
- Calf Gull
- Wilson's Phalarope
- Greater Yellowlegs
- Curlew
- - - - -

- Cliff Swallow
- Pintail
- Kingbird
- Common
- Wren

July 17
 X seen a bird in a nest. It was a yellow throat
 with a yellow throat & yellow throat
 and yellow throat & yellow throat
 other attempted to escape from the nest

mint birds

1. Coots met in open field
 in any case.

- July 18
- Barn Swallow 3559-60-61
 - Wren
 - Yellowthroat
 - Chimney Swift 1 nest
 - S. Wren
 - Wren
 - Night Hawk
 - Savannah Sparrow
 - Black Tern
 - Mallard
 - Green-winged Teal
 - Cowbird
 - Cuckoo
 - Gull
 - Black-bellied Plover
 - Song Sparrow
 - Great Blue
 - Canada Goose
 - Coot 40 small in hole 3 dead
 - Red-bellied Plover
 - Pintail
 - Coot
 - Wren
 - Marbled Godwit
 - Killdeer
 - Red-bellied Plover in air
 - Lesser Yellowlegs
 - Blue-winged Teal
 - Greater Yellowlegs
 - Cormorant
 - Widgeon
 - Bullhead Duck
 - Solitary Sandpiper

July 19

- July 19
- long tailed Chickadee
 - no 2 parrots
 - Maryland yellowthroat
 - Goldfinch
 - Cowbird
 - Blue Jay
 - Red-bellied
 - Red-shouldered
 - American Crows
 - Phoebe
 - Kingbird
 - Empidonax
 - House Wren
 - Mangrove
 - Blue
 - American Cuckoo
 - Yellowthroat
 - Virginia Rail
 - Turkey Vulture
 - Call Quail
 - Great Horned Owl
 - Marsh Wren

27-54-1-1

20-1-1-5

38

27

62

July 20

- July 20,
- Great Blue Heron
 - Night Heron
 - Cinnamon Teal
 - Killdeer
 - Coot parents with young
 - Spotted Sandpiper
 - Redwing
 - Kingbird
 - Abert
 - Avocet
 - Calif. Gull
 - Yellowlegs
 - Barn Swallow
 - Duck
 - Stilt 2 yg in river
 - Red head 4 yg in river
 - Forster Tern
 - Magpie
 - Swainson's Sparrow
 - Kingfisher
 - Pelican
 - Red-shafted Flicker
 - Black Turn
 - Shorebird young
 - Ruddy Duck
 - Pintail
 - Mallard 1 on bank
 - Marsh Hawk
 - Redwing
 - Brewer Blackbird
 - Sharp-shinned Hawk
 - Snowy Plover
 - Song Sparrow

- Willit.
 - Roughly mixed & washed
 - Large 13 inch 9
 John best Coarse
 Monarch
 Manganese Chloride

Kahlenberg. Outlines of Chemistry - 1911

p. 120.

acids reddens blue litmus.
 When sulphur burns in oxygen
 & sulphur dioxide results SO_2 .
 uniting with water



By passing sulphur dioxide
 mixed with oxygen over red-hot
 platinum particles SO_3 is formed.



An acid is a compound containing
 hydrogen which may be replaced
 by a metal, the product formed
 being a salt.

Commonly they have a sour taste
 & reddens blue litmus. There are
 acids so weak however that
 they do none of these things.

SO_3 is an anhydride of H_2SO_4 .
 The weight of SO_3
 is known as the anhydride
 of H_2SO_4 .

Bases turn red litmus blue
 and when treated with an
 acid become neutral. do not
 affect litmus.

Have Kahlenberg.

Allen's Commercial Organic analysis
1913 p. 344

Proteins are bases produced in the body. The decomposition of animal & plant tissues & in all cases are formed by bacterial action in the breaking down of proteins into peptides & by further degradation into amino acids and finally into ammonia, carbon dioxide, methane etc.

Some proteins are highly toxic but in general the bodies formed by putrefaction are not poisonous. Toxic effects are not destroyed by cooking.

Symptoms of poisoning usually commence with nausea, vomiting, pain in the abdominal region & diarrhoea. Nervous symptoms and general muscular weakness, prostration & sometimes, spasms; followed by fever, headache & thirst.

Coma, convulsions, dilatation of pupil, disturbance of vision, with drowsiness & occasionally cancer are observed also.

Post mortem appearances are similar to those produced by mineral nutrient poisons.

Symptoms of putrefactive poisoning rarely become developed in less than 6 to 8 hours & in some cases are much longer delayed.

Typhotoxin $C_7H_7O_2N$ produced by the typhus bacillus is a strong base of alkaline reaction & possesses poisonous properties.

Arseinal proteins come from the putrefying corpses of animals poisoned by arsenic. & highly toxic.

Flint - Handbook of Physiology
Macmillan 1905

Bile contains Sodium united
with two acids - glycolic
& lauropholic acids. The biliary
acids of these are probably those
concerned in digestion.

In fasting animals the
gall bladder is distended with
bile, but in animals opened
soon after feeding it is nearly
always empty. Actual secretion
of the bile by liver is also
influenced by digestion.

One of uses ascribed to bile
is that of stimulating peristaltic
movements of small intestine
and of promoting peristalsis in
the intestinal contents & the
abnormal developments of gas.

In cases of biliary fistula
there is great loss of weight.

Gas found in the intestine
has an important mechanical
office. Keep the canal distended
to the proper degree support the
walls of the intestine & assist
constriction.

Liver is abundantly supplied
with nerves both cerebral spinal
& sympathetic.

July 22

- Meadowlark
- Kingbird
- Great Blue Heron
- Barn Swallow
- Cowbird
- House Wren
- Goldfinch
- Red-wing
- Red-wings
- House Wren
- Song Sparrow
- Red-shafted Flicker
- California Gull
- Red-head
- Yellowhead
- Great Horned Owl
- P. Owl
- Immature Owl
- Shrike
- Coot
- Virginia Rail
- Quail
- Common Rail

- Bobolink
- Song Sparrow
- Bullock Oriole
- Yellow Warbler
- Kingbird
- Robin
- Goldfinch
- House Wren
- Lazuli Bunting
- Spotted Sandpiper
- Magpie
- Crow
- Magpie
- Red-winged Blackbird
- Great Blue Heron
- Red-wings
- Meadowlark
- Foxglove
- Common Rail
- Coot
- Barn Swallow
- House Wren
- Kingbird
- Immature Owl
- Mallard
- Red-head
- Red-billed Gull
- Black Tern
- Cowbird
- California Gull
- Yellow-head
- Red-shafted Flicker
- Western Sandpiper

- [illegible]

several sick and temp. smother
 under was 75.4°
 in shallow water on flat
 smooth to smooth sand. Dried
 not fly. wings either held out
 spread or with shoulder close
 to body & if disjunct. The feet
 were extended behind. Left
 being more helpless than right
 when supported the first contact
 on the right foot with the
 other standing out behind. Not
 easily bent at joint, weight
 of wing drooped but not enough
 to stain feathers. birds want that
 velocity of wing flap at a fair rate
 across water.

Coot temp anal 106.5!
Found salting in nose in four
inches of water. sat in Lyn
prodding head as though honey-
occasionally dipped ~~head~~ in water
it about as though fishing but
seemed only to be ~~algae~~ when
it withdrew head. At
first it could not stand upright
made no attempt to walk. Skin
was ill to handle. It fell
and took a few steps trying to
walk but soon gave out it went
slipping about on back propelled
by feet. It frequently stretched
the head and abdomen.

- July 26
- Kingfisher
 - Wilson Snipe
 - Kingbird
 - Yellow Warbler
 - Spotted Cowbird
 - Night Heron
 - Crows
 - Song Sparrow
 - Marsh Wren
 - Avocet
 - Goldfinch
 - Yellowhead
 - Blue Virginia
 - Golden Plover
 - Cinnamon Teal
 - Tree Swallow
 - English Sparrow
 - Maryland Yellowthroat
 - Red Swallow
 - Dove

1920 June 3
1921 June 2

July 27

- Kingfisher
- Yellow Warbler
- Song Sparrow
- Crows
- Caspian Tern
- Kingbird
- Night Heron
- Cinnamon Teal
- English Sparrow
- Golden Plover
- Maryland Yellowthroat
- Towhee
- Spotted Cowbird
- Goldfinch
- Great Blue Heron
- Black Duck
- Yellowhead
- Marsh Wren
- Avocet
- Goldfinch
- Blue Jay
- Raven
- Crow
- Mourning Dove
- Meadowlark
- Golden Plover
- Dove
- House Finch
- Parula
- Redstart
- Snowy Heron
- Lesser Yellowlegs
- Swamp Sparrow
- W. Heron
- Wilson Snipe
- Blue Jay
- Maryland Yellowthroat
- Towhee
- Spotted Cowbird
- Goldfinch
- Great Blue Heron
- Black Duck
- Yellowhead
- Marsh Wren
- Avocet
- Goldfinch
- Blue Jay
- Raven
- Crow
- Mourning Dove
- Meadowlark
- Golden Plover
- Dove
- House Finch
- Parula
- Redstart

- [illegible]

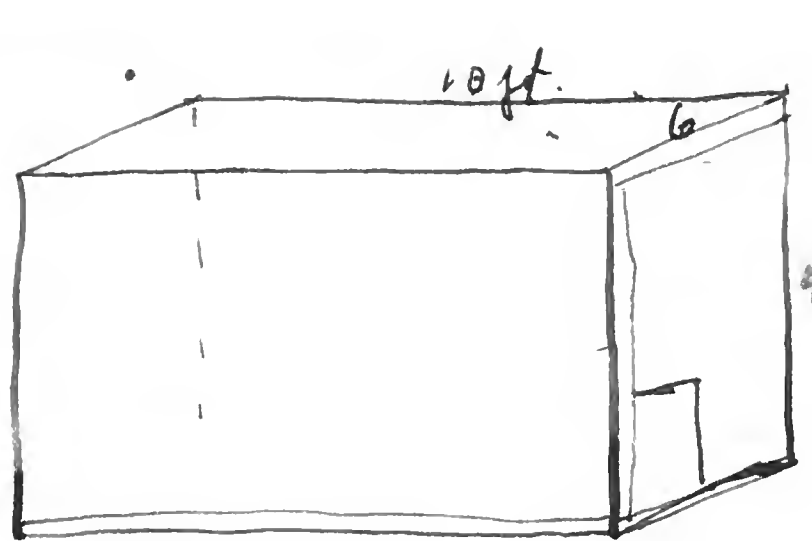
[illegible]

1. *Alouatta palliata* (Howler)
 2. *Alouatta palliata* (Howler)
 3. *Alouatta palliata* (Howler)
 4. *Alouatta palliata* (Howler)
 5. *Alouatta palliata* (Howler)
 6. *Alouatta palliata* (Howler)
 7. *Alouatta palliata* (Howler)
 8. *Alouatta palliata* (Howler)
 9. *Alouatta palliata* (Howler)
 10. *Alouatta palliata* (Howler)

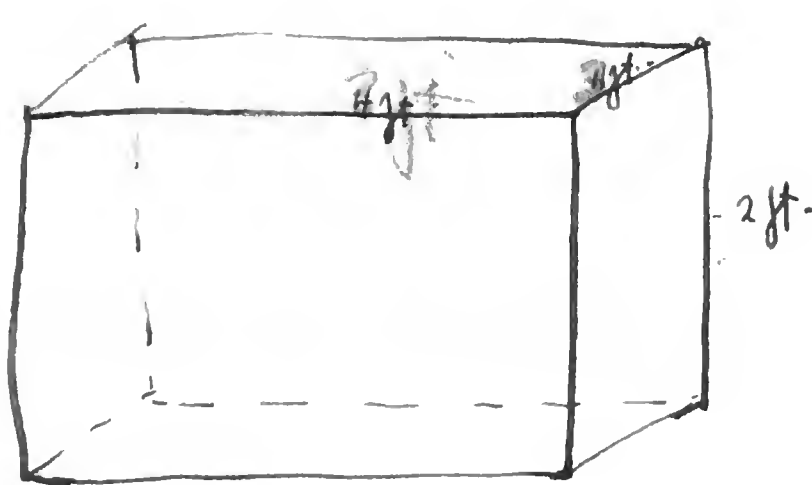
[Faint handwritten notes, possibly bleed-through from the reverse side.]

103.4 10 ft. 4 in. 10 ft. 4 in.
 103.5 10 ft. 4 in. 10 ft. 4 in.
 103.6 10 ft. 4 in. 10 ft. 4 in.
 103.7 10 ft. 4 in. 10 ft. 4 in.
 103.8 10 ft. 4 in. 10 ft. 4 in.
 103.9 10 ft. 4 in. 10 ft. 4 in.
 104.0 10 ft. 4 in. 10 ft. 4 in.
 104.1 10 ft. 4 in. 10 ft. 4 in.
 104.2 10 ft. 4 in. 10 ft. 4 in.
 104.3 10 ft. 4 in. 10 ft. 4 in.
 104.4 10 ft. 4 in. 10 ft. 4 in.
 104.5 10 ft. 4 in. 10 ft. 4 in.
 104.6 10 ft. 4 in. 10 ft. 4 in.
 104.7 10 ft. 4 in. 10 ft. 4 in.
 104.8 10 ft. 4 in. 10 ft. 4 in.
 104.9 10 ft. 4 in. 10 ft. 4 in.
 105.0 10 ft. 4 in. 10 ft. 4 in.

105.1 10 ft. 4 in. 10 ft. 4 in.
 105.2 10 ft. 4 in. 10 ft. 4 in.
 105.3 10 ft. 4 in. 10 ft. 4 in.
 105.4 10 ft. 4 in. 10 ft. 4 in.
 105.5 10 ft. 4 in. 10 ft. 4 in.
 105.6 10 ft. 4 in. 10 ft. 4 in.
 105.7 10 ft. 4 in. 10 ft. 4 in.
 105.8 10 ft. 4 in. 10 ft. 4 in.
 105.9 10 ft. 4 in. 10 ft. 4 in.
 106.0 10 ft. 4 in. 10 ft. 4 in.



4 uprights 4 ft. long } - 3 2x4 12
 3 full length 10 ft } 4 3- 2x4 10
 3 cross length 4 ft.
 2 piece 1x4 x 12 ft.



- 1 2x4 10 ft -
- 2 1x4 12 ft

132 ft
 16 ft
 40 ft
 9 ft
 4 ft
 2 ft
 3 ft

- July 30
- Solitary Tern
 - Meadowlark
 - Barn Swallow
 - Great Sparrow
 - Indigo Bunting
 - Song Sparrow
 - Blue Jay
 - Kingbird
 - House Sparrow
 - Robin
 - Cowbird
 - Veery
 - Goldfinch
 - Lazuli Bunting
 - Song Sparrow
 - Flicker
 - Brown Blackbird
 - Grackle
 - Mourning Dove
 - Lark Sparrow

4 1 + 4 - 12 ft.
 4 2 x 4 - 10 -
 2 2 x 4 - 12 -

July 21

- Gold Finch
- Wood Thrush
- Yellow Warbler
- Cowbird
- Chimney Swift
- House Wren
- Blue Jay
- Red Wing Blackbird
- Canada Goose
- Ring-necked Pheasant
- Bank Swallow
- Solitary Sandpiper
- Parula
- Black Tern
- Redhead
- Lesser Greenbacked Grebe
- Mallard Duck
- Spoonbill
- Greater Yellowlegs
- Great Egret
- Little Egret
- White Ibis
- Whooping Crane
- American Bittern

note in pencil: alkali

my husband.

- young of the year
- Snowy Plover

[Faint handwritten notes at the bottom of the page]

Chad - small - 1
Yellow water
on island

...head long ...

Mallard edge of lake. Gtly. to
fresh along. Simply with
spaced by the pond. We indeed
started - now. Briefly away partly
on boats and temp. ~~was~~ 1. high from
Cascades
Portland 2. in the old
Mammal.
S. from 1. in the old
2. in the old

[illegible]

August 5

1 Barn Swallow 1 found hawk 1090

1 Brown Blackbird

1 Cuckoo

1 Meadowlark

1 Yellow Warbler

1 Kingbird

1 W. Kingbird

1 Robin

1 Brown Sparrow

1 English Sparrow

1 Yellow Warbler

1 Downy Woodpecker

1 Night Heron

1 Great Blue Heron

1 Mourning Dove

1 House Finch

1 House Wren 19

1 Goldfinch

1 Brown Cowbird

1 Lesser Yellowlegs

1 M. W. Wren

1 Green Heron

1 Pine Siskin

1 Goldfinch

1 Redstart

1 Redstart

1 House Wren

1 Goldfinch 50

1 Downy Woodpecker 1004

1 Forked Deer

1 Goldfinch

1 House Wren

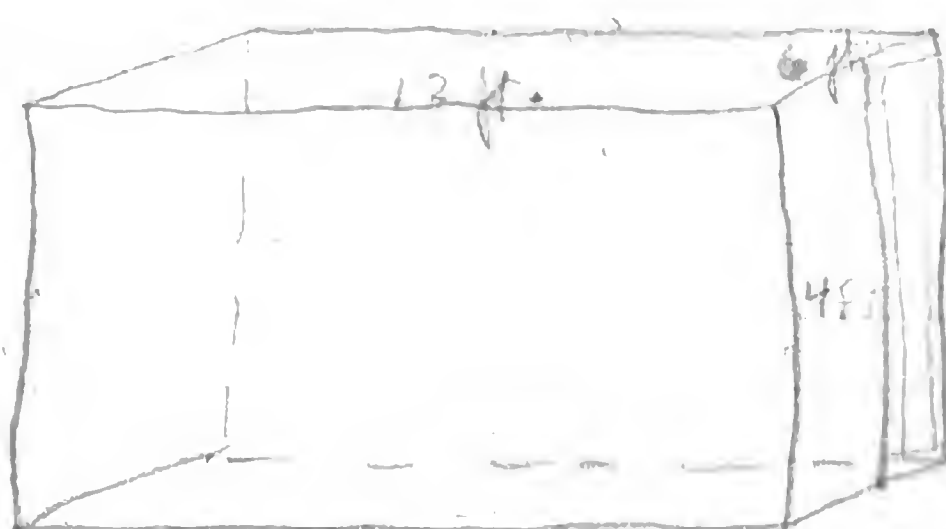
1 House Wren

Aug. 8
 Chipping Sparrow
 Wilson Sparrow
 - Albin
 Arvert (lawyer)

2510 Vermilion O. d.
 11 Vermilion O. d.
 12 Vermilion O. d.
 13 Cyanitta
 14 Vermilion O. d.

- Aug 9
- Sage Thrasher
 - Robin
 - Flicker
 - Mourning Dove
 - Lazuli Bunting
 - Sharp-shinned Hawk next 10/11/12/13/14
 - Mc Gowan
 - Hummingbird - white & purple
 - Indigo Bunting
 - Long-tailed Jay Feb 10/13, Jan 10/14
 - Hermit Thrush
 - 7. S. Sparrow
 - Mountain Towhee
 - W. Warbling Vireo at 10/13/14
 - W. House Wren
 - " " Hawk
 - " " Redtail
 - Clark's Crow
 - Pine Siskin
 - " "
 - Virginia Warbler Feb 10/13
 - " "
 - " "
 - " "
 - " "
 - " "

John opening the door of the house
 that the night before he had
 to get there the night



3

8-2x4x12

4-1x4x12

36 lin ft. 4 ft 1" mesh wire

12 " 6 ft. 1" "

1 lb stop nuts small.

1 lb 16 d.

1 lb 6 d.

1 pr 3" stop hinges.



1-2x4-14

1-2x4-12

2-1x4-12

2-2x4x12

1-2x4x16

14 ft. 3 ft wire.

Aug 10

- Sparrowhawk
- Kingfisher
- Song Sparrow
- Red-wing
- Spotted Sandpiper
- Night Heron
- Western Grebe
- Lazuli Bunting
- Yellowthroat
- Yellow Warbler
- Swainson Hawk
- various broken wings, &c
- Lesser Yellowlegs
- Coot
- Forster Tern
- Killdeer
- Greater Yellowlegs
- Marsh Hawk
- Widgeon
- Redhead
- Barn Swallow
- Rough-winged Swallow
- Field Sparrow
- Meadowlark
- Cinnamon Teal
- W. Kingbird
- Goldfinch
- Ring-necked Pigeon
- Red-bellied Sucker
- Canada Goose
- Tree Swallow
- Marsh Wren
- Tit

- Continued from page 2

- Marsh Wren
- Blue Gnatcatcher
- Yellow Warbler
- Common Nighthawk
- Red-winged Blackbird
- American Goldfinch
- Yellowthroat
- ~~104~~ ~~1045~~
- Golden-crowned Kinglet
- Virginia Creeper
- Yellow-bellied Sapsucker
- Red-bellied Woodpecker
- Carolina Chickadee
- Green-winged Teal
- Blue-headed Vireo
- Red-bellied Gnatcatcher
- Mallard Duck
- Tit
- Dove
- House Wren
- Blue Jay
- Grackle
- Raven
- Pheasant
- White-throated Sparrow
- White
- Great Blue Heron
- Godwit

Mallard ~~could not dive - could~~
~~not thrust head beneath water -~~
~~held bill with point resting on~~
~~ground - anal temp 107.4~~
~~Two green-winged Teal with tail~~
~~eaten from by gulls - 22.6 97.4~~
~~one had anus exposed - birds~~
~~could swim but could not rise on~~
~~land -~~

~~1. Lawrence~~ 1. Mallard

1. G. humilis associated with grass
hills as well as in brush, evergreen
forest and in open places.
Common water side of the
river in the vicinity of the
city of Portland, Oregon.

~~Paintail~~

gas covered by the land

W. J. Bennett

Mr. Mullard's coat of arms and family
helps -

helpless -
to number of your eggs which will go
about a 1/2 inch

Wentail 102.9

102.8 11/16/91

is already too much for you and
will be a great deal more if you
will ever be there.

Wing. 13

- Raven
 - Bullock Oriole
 - Kinglet
 - Titmouse
 - Mockingbird
 - Rose Breasted Grosbeak
 - Blue Jay
 - Virginia Creeper
 - House Wren
 - Cowbird
 - Parula
 - Indigo Bunting
 - American Goldfinch
 - Starling
 - House Sparrow
 - Yellow Warbler
 - Mallard
 - Green-winged Teal
 - Gull
 - Duck
 - Coot
 - Widgeon
 - Lesser Yellowlegs
 - Greater Yellowlegs
 - Sandpiper
 - Plover
 - Phalarope

~~Greenish~~ could swim but
not stand - left leg shorter
than right - probably those
of white anal tube - ~~and~~
~~somewhat~~ colored with
dark streaking - ~~very variable~~
another with little variation
anal tube ~~long~~. I left her.

Slightly above the right
 side of the head (head
 could be turned there, you
 know to the right, but
 turned to the left. The
 head is turned with the
 body, but the head is
 eyes are turned to the

eyes
 I was this
 started
 looking
 my
 and
 another
 first
 follow

\$ per bill - probably half price. Good
- but you might find some better ones
- and then there is the fact of any
- and then there is the fact of any

11

9-1-11

4/11/1941

looked up at the same drawing book
 of some 2 hundred water birds
 to see if I could find the same
 species as the one I had just
 found. I did not find it.

Common Teal? 100-110, pale
 not downy as before. I did
 could detect no difference in
 feet eyes.

green & white. Differs down
 side. Head small. bill. Much
 white in the throat.

Pintail I could not support
 about and took the same
 as the one I found.

Yellowhead
 107.6 } ♀♀
 108.4 }

- Aug. 14
- Lesser yellowlegs
 - Blk headed grosbeak
 - Solitary Sandpiper
 - Bank Swallow
 - Yellow head ♂ larvae
 - Night Heron ♂
 - Foster Tern ♀ ♀
 - ibis
 - Bank Swallow
 - Yellow Warbler
 - Virginia Rail
 - Canada Duck
 - Pintail
 - Green wing
 - Duck
 - ibis
 - Common Teal
 - ibis
 - ibis
 - ibis
 - Magpie
 - Dr. Yellow

[illegible]

105 Quivering 34-29-9-6-4-13-5-5
 22 Pintail 1-4-2-1-7-3-4
 7 Goldeneye 1-1-1-1-3
 5 Mallard 1-1-1-1-1
 1 Tit 1
 1 Crow 1
 1 Redhead 1-
 142

P. 15
Aug. 16

- Bobolink
- Blue Jay
- W. S. S. S. S.
- Goldfinch
- Killdeer
- Great
- Tit
- Finch
- Greenwing
- Mallard
- Snowy Plover
- Great Blue
- Night "
- ✓ Ruddy duck.
- Canada geese.
- Dove
- Coot.

2 Seal
2 P. tail
3 Mallard
2 Avocet.

1 Head
1 P. tail
1 Seal } 16

released
1 dove } 17

Aug. 17

- Barn Swallow
- Bank "
- Jun "
- Cedar
- Caspian Jun
- Junco "
- Magee
- Spotted Sandpiper
- Yellowhead
- Night Heron
- Bullock Oriole
- Yellow Warbler
- Green-winged Teal
- P. tail
- Marsh Hawk
- Prairie Sparrow
- Redwing
- Flicker
- Kingbird
- English Sparrow
- Mayflower
- Great Blue Heron
- Dove
- W. S. S. S. S. - W. S. S. S. S.
- Coot
- Tit
- Killdeer
- Mallard
- Ruddy Duck
- Avocet
- Green-winged Teal
- Snowy Plover
- Kingbird

- Robin
- House Finch
- House Sparrow
- Meadowlark
- Yellow Warbler
- Brown Towhee
- Bay Breasted Warbler
- House Wren
- Blue Jay
- Red Winged Blackbird
- Cowbird
- Goldfinch
- Starling
- Chipping Sparrow
- Song Sparrow
- White Throated Sparrow
- Junco
- C. Wren
- House Finch
- House Sparrow
- Meadowlark
- Yellow Warbler
- Brown Towhee
- Bay Breasted Warbler
- House Wren
- Blue Jay
- Red Winged Blackbird
- Cowbird
- Goldfinch
- Starling
- Chipping Sparrow
- Song Sparrow
- White Throated Sparrow
- Junco
- C. Wren

Sparrow 1
 Yellow 1
 Meadowlark 1
 House Wren 1
 About 1111
 Wren 1
 Still 111

Aug 19

- Robin
- House Finch
- House Sparrow
- Meadowlark
- Yellow Warbler
- Brown Towhee
- Bay Breasted Warbler
- House Wren
- Blue Jay
- Red Winged Blackbird
- Cowbird
- Goldfinch
- Starling
- Chipping Sparrow
- Song Sparrow
- White Throated Sparrow
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- House Wren
- Blue Jay
- Red Winged Blackbird
- Cowbird
- Goldfinch
- Starling
- Chipping Sparrow
- Song Sparrow
- White Throated Sparrow
- Junco
- C. Wren

House Finch

- Sparrow
- Yellow
- Meadowlark
- House Wren
- Blue Jay
- Red Winged Blackbird
- Cowbird
- Goldfinch
- Starling
- Chipping Sparrow
- Song Sparrow
- White Throated Sparrow
- Junco
- C. Wren
- House Finch
- House Sparrow
- Meadowlark
- Yellow Warbler
- Brown Towhee
- Bay Breasted Warbler
- House Wren
- Blue Jay
- Red Winged Blackbird
- Cowbird
- Goldfinch
- Starling
- Chipping Sparrow
- Song Sparrow
- White Throated Sparrow
- Junco
- C. Wren

1007

Memorandum
Bear River Deer Club.
says that the Indians he has just
numbers of them look sick on the
flank of mountain peak. There is the
only landlocked affected to his knowledge.
About 1000 last year, a north
stained blue the water up to the

The flats north of the River come
from the dug. The pintails come
on in great numbers to feed on
dred bottom there and forget
moving on. These dotted flats
be found at least a hundred
feet back from the shore and
very few dead.

The world is most
when the rains fall the land
is flat.

W.C. Kelnap

Hooper, Utah

- Redpoll
- Goldeneye
- Merganser
- Kinglet
- Crow
- Wilson's Phalarope
- Raven
- Meadowlark
- Song Sparrow
- Tit
- Yellowthroat
- Goldfinch
- Bryans
- Great Blue Heron
- Green Heron
- Cuckoo
- Rose Breasted
- Ring Necked Pheasant
- Red Wing
- Green-winged Teal
- Sharp-shinned Hawk
- Barn Swallow
- Robin
- Night Hawk
- Grosbeak
- Yellow Warbler
- Night Hawk
- Marsh Wren
- Phalarope
- Merganser

gro guillem lost 75 or 100
 found birds in 1906 in slough
 Hooper. What point
 and ducks by Messrs. Kelnap
 & Kelnap in 1904

gull malady stomach
 full with mud.
 also malady
 mudhen
 fern silens.

Utah Lakes Survey - 0. 1898
 3 points from Ogden

17.60
 19.60
 1.25
 95.00
 352.00
 1760
 2207.00

W.C. Kelnap
 Hooper, Utah

1/1/1958

1/1/18

- ~~Pochylnus~~ 102.7

Species	Sex	Weight (g)
Sum. an. m.		104.6
Mallard	♂	105.0
"		107.0
Pintail		106.1
"		105.7
"	♂	102.3
"	"	103.3
"	"	103.0
"		99.2
"	♂	104.0
"		103.2
"		101.9
Scaup	♀	104.2
Grouse	♂	106.1
"	"	106.2
"	"	105.6
"	"	98.3
"	"	105.4
"	"	105.3
"	"	102.2
"	"	104.1
"	"	102.4
"	"	107.3
"	"	101.1
"	"	101.7
"	"	102.6
"	"	102.2
"	"	104.4
"	"	101.6
"	"	102.6
"	♀	96.2
"	♂	102.1
"	"	101.2
"	"	103.0

Green	1	102.9
"	1	101.2
"	1	99.1
"	1	91.2
"	1	103.3
"	1	98.2
"	1	104.2
"	1	104
"	1	101.4
"	1	102.7
"	1	100.0
"	1	101.0
"	1	103.0
"	1	104.2
"	1	104.4
"	1	102.6
"	1	100.5
"	1	102.5
"	1	105.0
"	1	103.4

Sat

Dead in pen this morning

- 1 Still
- 1 Aurore
- 2 Seal
- 1 Albino
- 1 Pintail

released 1 Seal + 1 Pintail.
 died from new lot

did Aug 25
~~1 Seal~~
~~1 Pintail~~
~~1 Seal~~
~~1 Aurore~~

did Aug 29
 Spoonbill 1
 Mallard 1
 Pintail 1
 Seal 2

Aug 28

Barn Swallow
 Cow
 Dove

- Night Heron
- Solitary Sandpiper
- Cowbird
- Killdeer
- Marsh Wren
- Redstart
- Coot
- Yellowlegs
- Branch Wren
- Greater Yellowlegs
- Duck
- Great Blue Heron
- Black Tern
- Mallard
- Common Seal
- Pintail
- Green-winged Teal
- Calif Gull

Dead 29

- 2 Seal
- 1 Pintail
- 1 Mallard
- 1 Spombill

Aug 29

- Night Heron
- Snowy
- Lesser Yellowlegs
- Branch Wren
- Marsh Wren
- Cowbird
- Killdeer
- Marsh Wren
- Redstart
- Coot
- Yellowlegs
- Greater Yellowlegs
- Duck
- Great Blue Heron
- Black Tern
- Mallard
- Common Seal
- Pintail
- Green-winged Teal
- Calif Gull
- Cowbird
- Killdeer
- Marsh Wren
- Redstart
- Coot
- Yellowlegs
- Greater Yellowlegs
- Duck
- Great Blue Heron
- Black Tern
- Mallard
- Common Seal
- Pintail
- Green-winged Teal
- Calif Gull

and those registered
 by house number

- Pintail 11
- Seal 22
- Mallard 4
- Coot 2
- Coot 1

40
 22

102
 49
 53

Aug 30

- Battem
- Bobolink
- Brown Swallows getting young
- Band "
- Tree "
- Robin
- Magpie
- Marsh Wren
- Night Heron
- Raven
- Gorge
- Yellowhead
- Great Blue Heron
- Cinnamon
- Cowbird
- Coot
- Spotted Sandpiper
- Swamp Sparrow
- Flicker
- Killdeer
- Marsh Hawk
- Green-winged Teal
- Water Tern
- Black "
- Greater Yellowlegs
- Fox gub.
- Abies
- Mallard
- Redhead
- Pintail
- Kingbird
- Cinnamon Teal
- Avocet
- Snowy Plover
- Ring-billed Gull
- Brown Sparrow
- Hawk Sparrow
- Wm. Wren
- Meadowlark
- English Sparrow

see Aug 29

Sp	pen #	
Mallard	7	
Spoonbill	2	
Cinnamon Teal	2	
Green-winged Teal	53	
Pintail	18	
Avocet	1	
Coot	2	
	<hr/>	
	85	

Aug. 30.

No. 2.
Birds O. N. Jones record.
No 3
Birds O. N. "

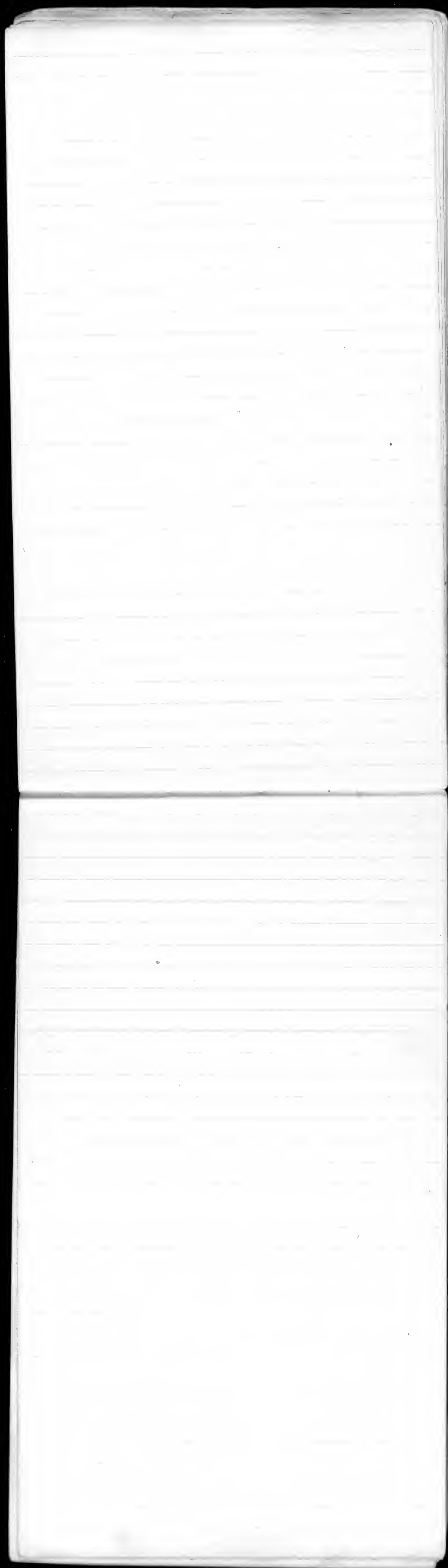
earth in shell boxes.
Find gull entrails.

July 13, 1911
New State - C.C. for survey of land

Aug 31

- Flicker
- Sparrowhawk
- Mourning Dove
- Robin
- ~~Blue~~ Sparrow
- Meadowlark
- Barn Swallow
- Swainson Hawk
- Song Sparrow
- Killdeer
- Kingbird
- W. Kingbird
- Marsh Wren
- W. Vesper Sparrow
- Swainson Sparrow
- Horned Lark

I had ground up New State
Lamb. I took
last some with infected
pool on 29.



Handwritten notes on a piece of paper, possibly a map or a list, with some text obscured by a large, dark, irregular shape (possibly a stain or a large mark).

1. *Proton* *in* *the* *gas* *phase*
 2. *very* *low* *rate* *of* *diffusion*

#4 $1\frac{1}{2}$ g $MgCl_2$ to 10 g to.

#3/ H_2SO_4 $1\frac{1}{2}$ ~~$2\frac{1}{2}$~~ g to 10 g to.

Sept 5 - 1914

Green Wing 111 111/11111 6 dead
111 2 2 2 2 3/3 1 3 1 (- 23)
(in cage)

Pintail 11 11/11111 4 dead
11111 2 - ~~Spent in cage~~

Mallard 111 (3 dead)
1 - ~~Spent in cage~~

Wood Duck 1 - ~~Spent in cage~~

Spanhill 12

1

~~Spent in cage~~

~~Crow 11~~

~~Shrike 1~~

~~Common Teal 1~~

~~Bay-Bill 1~~

~~Gull 1~~

~~Pointail shot affected~~
~~Carcass of Seal~~

~~Tremates maw stomach stones~~
~~intestine inserted~~

~~Term~~ 2547

~~Pointail 7~~
~~Albis 7~~
~~Pointail 7~~
~~Pointail 7~~
~~Pointail 7~~
~~Pointail 7~~

2548
 2549

~~Pointail carcass distended with blood~~

Pomarine	7		
Vernonia	7	2550	
Agouti	7	7202	2553
Manila	8 m.	7203	2551
Falco	8 m.	7204	2552

Head Sept 5
 - Sparrow

Sept. 6
 - 1 coot
 - 1 grebe

Sept. 7
 - 1 Pintail
 - 2 Seal
 - 1 Coot

- 12 Seal
 - 1 Sparrow
 - 8 Mallard
 19 Pintail

Ex per per.
 Seal 2 - 1 - 1
 Pintail 1 - 1 - 1
 Mallard 1 - 1

17 dead
 $\frac{17}{2} = 8 \frac{1}{2}$

129
 $\frac{129}{16} = 8 \frac{1}{16}$

Sept 6

- Pied-billed Grebe
- Lesser Frigatebird
- Lesser Frigatebird
- Masked Booby
- Yellow-billed
- Red-tailed
- Brown Pelican
- Sharp-shinned Hawk
- Kingfisher
- Pintail
- Green-winged
- Mallard
- Spotted
- Redhead
- Killdeer
- Coot
- Godwit
- Green
- Willet
- W. Sandpiper
- Coot
- Forster Tern
- Black
- Pelican
- Calif Gull
- Bittern
- Great Blue Heron
- Night Heron
- Cormorant
- Snowy Heron
- Sora duck.
- Spotted Sandpiper
- Dove

- Raven
- Goldfinch
- Redstart
- Flicker
- Song Sparrow
- Mockingbird
- Marsh Hawk
- Buzzard
- House Wren
- Song Sparrow
- Meadowlark
- Ring-billed Gull
- Bank Swallow

- ✓ 12 ducks ✓
- ✓ wheat
- ✓ box for ducks
- ✓ parcel post
- ✓ lumber
- ✓ drayage

10.20

150

170

20

253
70

200

14.55

10.000

45

200

- 1 Teal
- 1 Mallard
- 3 Pintail
- 1 Coot
- 1 Murrelet

Spied
during
absence

- 1 Pintail
 - 1 Mallard
 - 2 Teal

3 Pintail
5 Teal.

Sept 7

- Bobolink
- Common Cat.
- Barn Swallow
- Killed
- Stitch
- Marsh Wren
- Cormorant
- Common Seal
- Commoned Seal
- Sooty Tern
- Yellowhead
- Lesser Scaup
- Pintail
- goose
- Pink Hawk
- Arctic
- Lesser Yellowlegs
- Tough Tern
- Spotted Scaup
- Belted
- Night Hawk
- Grill Blue
- Dark Hawk
- Black Tern
- Redhead

Division of Era

- Brought in
- 2 grebe
 - 1 Common
 - 1 Killed

luck's jacking.

6:30 P.M.

#3 Seal up not bright
 Spotted set down
 other 2 H. water apparently
 not touched back on very little
 faeces evident. Wheat from last
 night not eating. ~~Strong~~ color
 of H 2 3 0+ evident

#4 birds alert. ~~flaw~~ against
 were, faeces then. water 1/2 gone
 wheat gone.

#5 sick bird with drain in
 neck. clumpy. wheat gone.
 not firm excrement in cage.
 one voided watery faeces.

#1 Sept 8 7:20 a

One seal found on beach. Chalk
 2 birds on beach. Seals on beach. Food eaten.
 #6 one bird on beach. Seals on beach.
 very little wheat eaten. 2 birds
 with closed eyes. All swimming.
 #3 birds still on beach. Wheat
 not eaten. very little water. Seals on beach and
 solution not muddy. Left water
 added because of no water.
 #4. 7/5 of solution remaining. birds
 action wild. much wheat remaining
 birds soft. fresh water abundant.
 #5 seal bird a little worse no
 other change. much wheat left in
 cage.
 #7 One seal dead on water.
 others active. Seals with feathers
 all pulled back. Mollard.
 added another seal at 8:15

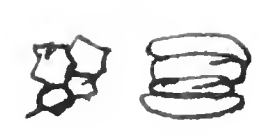
seal north of them 490
 clear. none up on beach.

#2 birds found on beach. base of
 Big stump. 2 birds.
 #3 2 birds. 2 seals. 2:30
 (Mollard. on beach. many dead. Chalk
 & mason board. Seals on beach. collected
 flats. from which water has just
 receded. no shade

Sept 8

- Bay Swallow
- Yellowhead
- Dove
- Rock Dove
- Martin
- Pigeon
- Bank Swallow
- Night Heron
- Spotted Sandpiper
- Marsh Wren
- Mollard
- Snowy Heron
- Cat
- Green-winged Teal
- Chimney Swift
- Plover
- Frigatebird
- Great Blue Heron
- Call Pigeon
- Hawk
- Osprey
- Cormorant
- Redtail
- Lesser Yellowlegs
- W. Sandpiper
- Greater Yellowlegs
- Phalarope
- Tit
- Diver
- Red-tailed Tropicbird
- Murre

#2 moved 2:45
 30 ft west from
 old shaded.



Put in 16
~~29~~ 25
 #1
 9

active teal - some 1 hour as
water - very active and

Mallard
drumming ~~WHHHHHHHH~~ }

all birds in the water
and had been in the water for some time
at least 1 hour and 15 minutes
and were still in the water
at 10:00.

Sept 17.

6:30

#3 Teal down very weak. head
held up but eye half closed.
Pintail - with feathers on head ruffled
Mallard - tamboon.

Domestic duck - apparently well
but out down frequently.

#4 Birds all active. What
fairly well changed up.
Sooty - on the ground. Fairly family
from about 10:00.

#5 said had some change of these.
Mallard birds all transferred to
19.

#1 birds active. #2 had teal
stripped.

Notes

shot at by club last year 12,000
average of D. for 1 year 106.

no shot before 1940.

change in 30 years from salt to
fresh water.

Also from deep water to shallow
water ducks.

Has seen old Squaw here

106
30
3180

52

River 100
Mile
Canaan The
Yellow River

2030 P. 17

The placed on the surface, under
 until late. banded scales the
 man and placed for half
 it. Put in 8 quinnings on common
 brought up. In the the
 birds were not given water when
 returned. Birds were all strong enough
 to swim, seemed to me to be
 individuals that would recover
 if conditions were right. Just small
 amount of wheat - 1

7/2 few small seals in water
seen a higher 3 feet water in the
other part of the pond. Several seals
seen on the shore all at once.
While one woman on the ship seal

Severely. Pinkeye very big just
all persons (7) taken.
Water from the water hole
from the bridge. 10/22

[illegible]

P.M.

Sept 12

- Magpie
- Blue Jay
- Crow
- Grackle
- Starling
- House Sparrow
- Pigeon
- Dove
- Goldfinch
- Chipping Sparrow
- Red Winged Blackbird
- Cowbird
- Flicker
- Kingbird
- Wood Thrush
- Starling Sparrow
- Catbird
- Indigo Bunting
- Song Sparrow

Small pintail sick in pen #1.
 mud filled in yesterday.
 Previously had sand bottom.

- Brought in by Ray 4 m-
- Avocet 2 III
 - American Owl 1
 - Catbird 111
 - Mockingbird 11

2:20 P.M.
 #5 Birds all active. Strongly
 fed wheat.
 I collected from pen #2 this is all done
 at home with water. All birds are very
 active rather wet and out of old
 ones are all in place. I fed them
 #2 Birds all active. Bright
 moved away from water to give
 light water. Birds all active.
 #1 Birds - water highly colored
 from pen #2. Bottom
 is muddy. I moved in water
 from pen #1. Water is now clear.
 Moved from #2 to #1. Water is now clear.

2000 F

- [illegible]

- *Quercus* *agrifolia*
 - *Quercus* *agrifolia*
 - *Quercus* *agrifolia*

~~Pamela~~

7:00 P.M.

#1 Pintail dead. 1
 2 Pintails in water. 1 active bird
 spotted from inside on bank, but
 seemed out & replaced by another.
 1 dead dug away from ground to
 see if it was a young bird.
 2 Pintails in water droopy.
 #6 1 dead in water two days.
 Catarrhal trouble. 2 dead.
 Still in water. Killdeer swimming
 but seemed to be weak. 2 dead
 outside. 1 dead Sandpiper etc.
 #7 Pintail active
 #8 O.K.
 #3 no change. solution introduced
 24 hours ago.

#2 Birds active but did not fly to water when put in. They were not interested in the water.

#5 downy young of the year all gone but two younglings. These two very active.

#8 One Pintail - one Mallard chick. Both active. I shot both of them. They were in the water. Birds were flying down. One just seen.

Brought in		32
Pintail	 	16
Cinnamon	 	16
Gull	 	2
Spoonbill		2

- Bittern
- Bobolink
- Barn Swallow
- Nighthawk
- Cowbird
- Green Heron
- Cinnamon Teal
- Raven
- Snowy Heron
- Night Heron
- Ring-billed Gull
- Lesser Frigate
- Yellow-head
- Swallow Sparrow
- Gull
- Killdeer
- White-throated Sparrow
- House Finch
- Blue Jay
- Great Horned Owl
- Crow
- Goldfinch
- Red-bellied Woodpecker
- Catbird
- House Wren
- Blue Jay
- Red-bellied Woodpecker
- Yellow-bellied Sapsucker

#1 ~~Helpless on bank~~ ~~on bank~~

#2 ~~2 Helpless younglings~~ ~~spread out~~ ~~and attracted by light~~

#4 ~~OK~~

#3 no change

#4 no change

~~released~~
~~1 Pintail~~
~~1 Greenwing~~

#1 ~~3 dead Pintails~~ ~~2 Helpless on bank~~

#2 ~~1 dead Mallard~~ ~~1 Greenwing~~
~~1 Greenwing~~

#3 no change

#4 no change

800 A.M.

#3

1 Mallard, 1 Pintail, 1 Domestic, 1 Greenwing

5dot
1 Mallard, 1 Pintail, 1 Domestic, 1 Greenwing

8505
ca } *Sturnella magna*

501 2 Green-winged Teal flew
 2 Green-winged Teal flew
 3 " " "
 4 Green-winged Teal flew
 5 Pintail in river
 6 Green-winged Teal flew
 7 Pintail flew
 8 Green-winged Teal flew
 9 Green-winged Teal flew

510 1 Pintail flew 570 P. ♀

1 Pintail flew
 2 Green-winged Teal flew
 3 Shoveller in river
 4 Green-winged Teal in river
 5 " in river
 6 Pintail
 7 " in river
 8 Green-winged Teal
 9 Pintail

520 Pintail flew 580 Mallard flew

1 " ♂ in river
 2 Pintail ♂
 3 " ♂ flew
 4 P. ♀
 5 Cinnamon Teal
 6 Pintail ♀ in river
 7 Mallard ♂ in river
 8 Green-winged Teal
 9 Green-winged Teal flew

530 Pintail 590

1 Pintail
 2 " ♀
 3 Green-winged Teal flew

1 Mallard ♂ flew
 2 Green-winged Teal flew
 3 Pintail ♂ flew

4 Mallard ♂ in river
 5 Pintail ♀ flew
 6 Green-winged Teal flew
 7 Pintail ♂
 8 Green-winged Teal ♀ flew
 9 Pintail ♂ in river

540 Green-winged Teal 600 P. 10.

1 Pintail ♀ in river
 2 Pintail ♂ flew over logs
 3 " ♀ in river
 4 Green-winged Teal flew
 5 Pintail ♂ in river
 6 " " "
 7 Shit flew
 8 Pintail ♂ in river
 9 " ♂ " "

550 " ♂ " " one foot without web

1 Cinnamon Teal flew
 2 Green-winged Teal
 3 Pintail ♀ flew
 4 P. ♀
 5 Pintail
 6 " ♀ flew
 7 Pintail ♀ flew
 8 Green-winged Teal
 9 Pintail ♀ flew

560 Pintail ♂ flew

+ Nettion 26
 - P. 54
 - Sp. 2
 - C. 12
 - G. 5
 - H. 1
 100

5.00

Sept 9 Normal

3 Birds - 11

24 - 11

11 - 11

11 - 11

Sept. 17

- Pelican
- Raven
- Cooper's Hawk
- Song Sparrow
- House Wren
- Redwing
- Crow
- Cornucopia
- Owl
- Barn Swallow
- No. Oriole
- Cuckoo
- Yellow
- P. Wren
- Cowbird
- Chipping Sparrow
- Gold Finch
- Starling
- House Finch
- House Wren
- Kingbird
- Indigo Bunting
- Green-winged Teal
- Blue Jay
- House Wren
- Woodpecker
- Common Teal
- Redhead
- Greater Yellowlegs
- Fish

21 birds killed. very much injured
 #6 birds

birds - some were for
 four inches

placed in the hollowed out part
 up

7 birds - some birds were for
 in the

15 birds killed

birds distinguished white neck
 smaller shown
 Mallard 1
 Greenwing III
 Spermophile I

birds were not distinguished
 Mallard 1
 Greenwing II

about
 Greenwing I
 Woodcock
 about 15 birds north of river
 40 dead

greenwing with white neck some
 white neck some
 white neck some

- Brought in
- Mallard IIII IIII IIII IIII 20
 - Woodcock IIII 7
 - Greenwing IIII IIII IIII IIII IIII IIII IIII 49
 - Spermophile IIII 4
 - Pintail IIII IIII IIII IIII IIII IIII IIII 65
 - Cinnamon II
 - Gadwall III

150

256

- 2
1
1
1
1

[illegible]

~~Dead Forest~~

[Faint handwritten notes]

3.30 PM
The birds were very high in the air.
I saw a few birds flying over the trees.
5. The birds were very high in the air.
I saw a few birds flying over the trees.

Sent out 6 - 97 - Hunter
in water - 8

100

~~the 'panda' is the 'panda'~~
~~the 'panda' is the 'panda'~~

By 1 and with the

dead on gube. Many Greenings
 5 Pintails with few Mallard
 one Calif. gull.
 one pintail 20,000 146 birds.

2/3 mile along east channel
 on west side 185 dead birds.
 not quite so many on east bank.
 300 in all. 3/4 of them Greenings.
 1 Snowy Plover, 5 about, 8 Mallard
 rest Pintail. 40 live birds seen

would make estimate for north
 half of Willard & put about this
 channel at 1200 dead. 7/3 of them
 dead more than two weeks.
 the three counts covered worst
 of it. Others were scattered
 walked a mile to a line of
 cattle tracks.
 2 Widgeon seen dead

- if I is to be done.
- Night hawk.
 - Night Heron
 - Killdeer
 - Song Sparrow
 - Redwing.
 - Western gube.
 - M. sp.
 - Ring-billed gull.
 - Woodcock
 - Audubon Warbler.
 - Calif gull
 - Great Blue Heron
 - Snowy Heron.
 - Crow
 - Canada goose
 - Plover
 - Meadowlark.
 - Towhee
 - Spotted Sandpiper
 - Goldfinch.
 - Pintail
 - Black Duck.
 - Plover
 - Pied-billed grebe.
 - Lesser Yellowlegs
 - Mallard
 - Green-winged Teal
 - Blue
 - Phalarope
 - Loon
 - Merganser
- Brigham
 Song Sparrow
 Bittern
 Sparrow hawk.

capillaries in villi distended & would be due to absorption of water from alimentary canal. Undoubtedly food is absorbed.

Does absorption matter is that which the kidneys excrete is shown off.

fact that kidney stones & uremic symptoms are affected by diet & also by water intake. Diet & water are shown actual amounts.

Spencer also shows water intake & also the amount of water in the body. Urine is too.

- English Sparrow
- Brewer Blackbird
- Lizard
- Magpie
- Vesper Sparrow
- Mourning Dove
- Ring-billed Gull
- Dove
- Ring-billed Gull
- Savannah Sparrow
- Green-winged Teal
- Sparrow
- White-crowned Sparrow
- Wild
- Mallard
- Downy Woodpecker
- Great Gull
- Red-tail
- Goldfinch
- N. Thrasher
- Avocet
- Gull
- Great Blue Heron
- Great Egret
- W. Grebe
- Forster Tern

۵۴۵

500 yards. I found a dead bull
in wood probably on same road
in back track.

Int of forest on the road was about 500 ft. long
about 3 ft. wide.

Kalamazoo, Mich.
 1888 - 1890

Beer factory with 3 drains.

The opening of factory has killed fish. Though the main part of the hucks have gone they come in to feed in considerable numbers on the newly flooded lands and were seen in the old channel but none were sick. In addition blue gills and Pelicans had gathered to the feast of fish but were not troubled.

- King-birded Tanager
- Carolina Warbler
- Bright Green
- Tit
- Kingfisher
- Blue Jay
- Foster's Tern
- Redwing
- English Sparrow
- Coot
- Yellowhead
- Mourning Dove
- Snow Bird
- Great Blue Heron
- King-birded Tanager
- Marsh Hawk
- Red-chapped Flicker
- Goldfinch
- Ring-necked Pigeon
- Western Gull
- Shrike-birded Pigeon
- Cormorant
- Duck Hawk

- Brought in
 - Pintail IIII IIII IIII IIII
 - Green-wing II
 - Mallard IIII
 - Skuas I
 - Gulls I
 - Gulls I

25
2
6
1
1
1
36

- House Finch
- English Sparrow
- Pipit
- Audubon Warbler
- Marsh Wren
- Cormorant
- Flicker
- House Sparrows
- Ring-billed Gull
- Ring-billed Gull
- Bullfinch
- Night Hawk
- Starling
- Avocet
- Horned Lark
- Great Horned Owl
- Duck Hawk
- Marsh Hawk
- Merganser
- Green-winged Teal
- Calif Gull
- Sparganell
- Common Sand
- Widgeon
- Killdeer
- Red-winged Blackbird
- Towhee

Sept. 22

- House Sparrow
- Raven
- Redwing
- Marsh Wren
- Snowy Plover
- Canada Goose
- House Finch
- Barn Swallow
- Song Sparrow
- Crow
- Night Heron
- Magpie
- American Cuckoo
- Yellowthroat
- Goldfinch
- House Finch
- Song Sparrow
- Dove
- Ring-billed Gull
- Bullfinch
- Crow
- Titmouse
- House Finch
- House Finch
- House Finch

1 3 Pintail, Mallard, helpless.
 3 Pintails, 1 gadwall dead.
 Pintail, mallard, dead birds
 very thin.

6 4 Greenings dead, rest O.K.
~~Killdeer dead yesterday~~ + Crow dead.

10 full, strong, some of Pintail
 eating from the water.

11 Birds active.

12 O.K.

3 Mallard active. Other active.

4 all active.

Dead bird left 9.30
 # 2 all active. put 1 at 6.15

3 empty

8 per bird dead. Others inactive.
 # 11 per bird dead. To a small
 pointed foot left. 10 feet. 10 feet.
 killed. 10 feet. 10 feet. 10 feet.
 high dark letters. 10 feet. 10 feet.
 10 feet.

water in 10 feet. 10 feet.

Sept 23

602 avocet }
603 " } all in
4 " } in water

5 Spoonbill. flew.

6 " " "

7 " " "

8 Cinnamon flew

9 Green-wing " "

610 " " "

1 " " in water

2 " " flew then

3 Cinnamon " "

4 Green-wing " "

5 " " "

6 " " in water

7 " " flew

8 " " in water

620 " " flew

1 " " in water

2 Spoonbill flew

3 Green-wing " "

4 " " rose then

5 " " flew

6 " " "

7 Pintail ♂

8 " ♀

9 " ♀

630 " ♀

1 " ♀ in water

2 " ♀ flew

3 Mallard ♂ in water

4 Pintail ♀ flew

630 Pintail ♀ in water

6 Gadwall ♂ flew

7 Mallard ♂ flew

8 " ♂ "

9 Pintail ♀ in water

640 " " "

1 " ♀ "

2 " ♂ flew

3 Mallard ♂ in water

4 " ♀ " "

5 Gadwall ♂ flew

6 Pintail ♀ in water

#8 Green-wing and Seal from
Death due to hemorrhage
in intestinal canal. Gut
filled with blood. no trace
of malady.

released

- Avocet	3
- Spoonbill	4
- Cinnamon	Seal 2
- Green-wing	16
- Pintail	13
- Mallard	5
- Gadwall	2
	<hr/> 45

dead wood.
 15-31-30-9-40-4-3-13-6-30-8
 13-11-20-30-4-18-20-57-20-18-19
 17-20-6

647 8 Green-winged Teal
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Brought in

- Pintail		17
- Grebe		3
- Snowy Plover		1
- S. tit		1
- Pectoral Sandpiper		1
- Goshawk		1
- Sparrow		1
- Mallard		1
		<hr/> 26

6.12 / 7.24

Released

- Green-winged Teal	20
- Pintail	10
- Mallard	9
- Snowy Plover	1
	<hr/> 40

24. 6:30 P.M.

#1 7 Birds very active fed what
were very hungry but

#1 2 Mallard male 1 Goshawk
drunk then shot very hungry

#1 6 shot then by force but it rejected
the food. 5 shot. 1 shot. 1 shot. 1 shot.
all hungry

#1 7 O. P.

#1 3 Mallard very active. 1 shot.
Teal with them. 1 shot. 1 shot. 1 shot.

#1 4 shot.

Banded Teal with #3.

11:30 a.m.
 #2 placed east of Roach house
 with some same duck & 2 feet
 from previous experiment & 100
 yards duck from No 9. White
 scale from Warren raked up
 & a solution prepared
 1/4 pint to 10 qts water. 1 disty
 milky solution at last.

685	Greenwing	in river
6	Pintail	1 ♀ flew
7	"	♂ "
8	"	h "
9	"	♀ "
10	"	" "
1	Mallard	♂ "
2	"	" in river
3	"	" flew
4	"	" "
5	"	" "
6	"	♂ "
7	"	♂ "
8	"	♂ "
9	"	♂ in river
100	Pintail	♂ flew

released

1 Greenwing
 6 Pintail
 9 Mallard -

6 3 8 M

#9 remaining birds O.K.

fed

#2 water 1/3 gone. fed

#3 birds same water apparently not touched - fed

#4 water more than 1/2 gone birds ate

#6 Hum/active, ate twice today. Still helpless, active

O.K.

#1 Two mallards + 1 Pintail on bank helpless - others O.K.
dead mallard

#7 all active

1 Mallard dead.

Sept 26

7:00 a.m.

#1 dead Mallard. One Pintail helpless. One Mallard weak. Others active. Bandaged Pintail + Mallard outside.

#6 Still weak. Others O.K. From

branch in pond. all long legs +

#7 Birds all active. Pintail split

to expose wing joints.

#9 O.K.

#2 solution gone. no change in birds.

#3 no change. solution removed.

James Band O.K.

#4 no change. solution removed. James thin.

- 26
- Barn Swallow
 - Raven
 - Pelican
 - Song Sparrow
 - Calif Gull
 - Corn Grouse
 - Yellowhead
 - Ochotona Wampus
 - Graywinged Teal
 - Mallard
 - Pintail
 - Great Blue Heron
 - Night Heron
 - Snowy Heron
 - Marsh Wren
 - Osprey what what
 - Golden
 - Heron
 - Western Sandpiper
 - least
 - Ring-billed Gull
 - Coot
 - Greater Yellowlegs
 - Duck Hunt
 - N. Phalarope

~~North Bay clean~~ birds on shore
 heaver followings parked
 Black Tern about

~~Brought in~~
 Pintail 11
 Widgeon 1
 Cinnamon Teal 1

Sept 27

7:00 PM

- #1 birds all in water. Mollusks
#2 birds much stronger
#6. Cinnamon Seal died still
on jet. Horn 10. K.
#7 birds active
#9 K. Green jar
#2 birds not much changed slightly
dumpy. Which not all eat. low
white faces notes. solution 1/2 gm
#3 no change solution 1/2 gm. x
#4 no change solution 1/2 gm
removed.

- #5 fed which birds 6:30 PM
quiet & mild.
#8 fed which. birds active

701 Still 0

2	Snowy Heron		
3	Spoonbill	♂	fluv
4	Greening		"
5	"		"
6	Pintail	♂	"
7	Widgeon	♂	in river
8	Pintail	♂	fluv
9	"	♀	in river
10	"	♀	fluv
11	Godwits		in river wings worn
12	Pintail	♂	fluv
13	"	♀	" fat
14	"	♀	" fat
15	Mallard	♂	" fat
16	Pintail	♂	" fat
17	"	♀	in river a part in back
18	"	♀	fluv
19	"	"	fluv packed but not packed
20	"	"	"
21	"	"	"
22	"	"	"
23	"	♂	packed & in river
24	"	"	"
25	"	"	"
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27	"	"	"
28	"	"	"
29	"	"	in river
30	"	"	fluv
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34	"	"	fluv
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100	"	"	"

735	Pintail	♂	in river
6.	"	"	"
7.	"	♀	fluv
8.	"	"	"
9.	"	"	in river
40.	"	"	"
1.	"	♂	"
2.	"	♀	fluv
3.	"	"	in river
4.	"	"	"
5.	"	"	"
6.	"	♂	"
7.	"	"	"
8.	"	"	"
9.	"	♀	fluv
50.	"	♀	"
1.	"	♂	in river
2.	"	"	fluv

released.

Still
Snowy Heron
Spoonbill
Greening
Pintail
Widgeon
Godwits
Mallard

1
1
1
2
44
1
1
1
52

47

Sept 29

753 bird from
4 quivering flew
5 " "
6 " "

751 Pintail 5 flew
8 Mallard 3 landed
9 Sparrow 8 "
60 Pintail 5 "
1 " "
2 " "
3 " "
4 " 3 flew
5 " "
6 " "

Sept 29

2:30 PM

#8 birds all active - killed
then released - 1st activity
4:00 PM activity active
#5 killed a couple of
others stopped - 1st killed
then released - 1st activity
Note: 1st activity

Samuel G. Phillips 2^d 76

1. *Quercus*
 2. *Quercus*
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- Green Swallow
- Blue Jay
- White-throated Sparrow
- House Finch
- Red-winged Blackbird
- Starling
- Song Sparrow
- Goldfinch
- Indigo Bunting Warbler
- Long-tailed Chukar
- Song Sparrow
- Yellow-rumped Cuckoo
- Titmouse
- Green Heron
- Night Hawk
- Wood Duck
- Mallard Duck
- Canada Goose

Warm & pleasant

The seal dead
 other birds other in water
 frozen - meat in barrel

Oct. 1

- Flicker
- Common
- Calif. gull
- Pintail
- Green-winged Teal
- Gunnison " 3
- Gadwall 6
- Hargram 3
- Mallard
- Redhead 2
- Canada goose
- Albis
- Anser
- Juncos
- Western gull
- Audubon's Warbler
- 2 Motrichia leucophrys
- W. Chipping Sparrow
- Savannah Sparrow
- Marsh Wren
- Ruby-crowned Kinglet
- Coot
- Pelican
- Ring-billed Gull
- Night Heron
- Sparrow
- Great Blue
- Pileated
- W. Sandpiper
- Long-billed Dowitcher
- Ring-billed Swallow
- Redwing
- Raven
- Magpie

Q. 12

- 1. *Phalaropus lobatus*
- 2. *Phalaropus lobatus*
- 3. *Phalaropus lobatus*
- 4. *Phalaropus lobatus*
- 5. *Phalaropus lobatus*
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- 8. *Phalaropus lobatus*
- 9. *Phalaropus lobatus*
- 10. *Phalaropus lobatus*

- English Sparrow
- Mockingbird
- Goldfinch
- Blue Jay
- House Wren
- Song Sparrow
- Oriole
- American Cuckoo
- American Goldfinch
- House Wren
- House Finch
- Kingfisher
- Kingbird
- Chickadee
- Flicker
- Junco
- Red Winged Blackbird
- Pine Siskin
- American Cuckoo
- Red Jay
- Red Jay
- Osprey
- Hermit Thrush
- Red Tailed Hawk
- Indigo Bunting
- Spotted Towhee
- Red Winged Blackbird
- Crow

2000

Had a heavy rain. From
steady ~~Southwest~~ wind. Clouds
drifted. Wind followed.

Oct 26

- Ellis Bingham
 - Mendenhall's Cornucopia
 - Maggini
 - ~~Franklin~~
 - Arcot
 - Still
 - Marsh Hawk
 - Ruddy Duck
 - ~~Jack~~
 - Sparrow Hawk
- level plain grassy
sagebrush flats
little mountains no trees
gullies & flats with water
depression & old channels
series of rounded channels
15 ft. banks
cuttail
above Blue Creek
country rolling up hill

Oct 27

- Raven
- Pigeon
- House Finch
- Song Sparrow
- Brewster's Blackbird
- Goldfinch
- Horned Lark
- Junco
- Orchard Warbler
- ~~Junco~~
- Sage Sparrow
- Song Sparrow
- Mallard
- Gull
- Marsh Hawk
- Horned Lark
- Killdeer
- Grouse
- Marsh Wren
- Virginia Rail
- Woodcock
- Rock Wren
- Great Horned Owl

Oct 76

L. E. Olsen Harper Utah R. 1 D. 1.
 has noted sick ducks since fall of
 1904 all quackered dead sitting about
 in brush & about grass all got
 seen in November before freezing
 there not bad until 1909 then
 large numbers seen. in 1911
 900 to 1000 trapped even buried.
 those picked up all lay in water
 those that had not floated.
 large flocking noted 1899 for
 3 years small began quacking
 later then doubled and apparently
 now is much increased.
 In 1911 south channel dry just
 dry up at fall in 2. but
 Olsen looks from river. Have
 never had sick ducks there.
 Sick sick 2 1/2 m from Salt Water
 been seen to be seen sick ducks

small dead ducks
 water in shallow with bubbles
 of cement salt
 salt in shallow water
 saline not salty water FeSO

Oct. 14 Promontory Pt.

- Raven
- Meadowlark
- House Finch
- No. Phoebe
- Magpie
- Engl. Sparrow
- Horned Lark
- Tit
- Goldfinch
- Golden-crowned Wren
- W. Ch. Lark
- Amphispiza
- White-crowned Sparrow 109.7
- Miner 109.1
- Flicker
- Robin
- Pine Siskin ad 107.4 yg 100.5 shot in hand 107.6
- Red-breasted Nuthatch
- Juncos
- Passerella iliaca H.D.
- White-throated Sparrow
- W. Evening Grosbeak 107.5 109.5
- Woodchuck
- Sialia arctica
- Baeolophus inornatus per line
- Say's Phoebe
- Mockingbird
- Song Sparrow
- Downy Woodpecker
- 2 camp Duck

10.4.76

Chrysothamnus abd. 1 Mentzelia

graminea

Gravel track, rimelrow of fly larvae
many carp 2 1/2 - 3 inch long
rimelrow in places 2 in deep by the
30 ft wide.

Oct. 8

- Marsh Wren.
- Gadwall
- Pintail
- Green-winged Teal
- Mallard
- Long-billed Dowitcher
- Ring-billed Gull
- Redwing
- Bittern
- Night Heron
- Great Blue
- Kingbird
- Flicker
- Merganser
- Woodpecker
- Red-bellied Gull
- Magpie
- Golden Eagle
- Marsh Hawk
- English Sparrow
- Starling
- Pigeon

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No.	Species	Sex
2754	Sparrow	♂
5	Mallard	♀
6	"	♀
7	"	♀
8	Mallard	♂
9	"	"
10	"	"
11	"	"
12	Pintail	♀
13	"	"
14	Gadwall	"
15	Pintail	"
16	"	♀
17	"	♀
18	"	♀
19	Green-winged	♂
20	"	♀
21	"	♀
22	"	♀
23	"	♀
24	"	♀
25	"	♀
26	"	♀
27	"	♀
28	"	♀
29	"	♀
30	"	♀
31	"	♀
32	"	♀
33	"	♀
34	"	♀
35	"	♀
36	"	♀
37	"	♀
38	"	♀
39	"	♀
40	"	♀
41	"	♀
42	"	♀
43	"	♀
44	"	♀
45	"	♀
46	"	♀
47	"	♀

No.	Species	Sex
20	Gadwall	♀
1	Pintail	♂
2	"	♂
3	"	♂
4	"	♀
5	"	♀
6	"	♀
7	"	♀
8	"	♀
9	"	♀
30	"	♀
1	"	♀
2	"	♀
3	"	♀
4	Gunning	♀
5	"	♀
6	"	♀
7	"	♀
8	"	♀
9	Mareca	♀
40	Mallard	♀
1	Gunning	♀
2	"	♀
3	Sp. bill	♀
4	Gadwall	♀
5	Bluebill	♀
6	Pintail	♀
7	"	♀
8	"	♀
9	"	♀
50	Gadwall	♀
1	Roadhead	♂
2	Pintail	♂
3	Mallard	♂

No.	Species	Sex
8		♂
9	"	"
20	"	♀
2	Spontill	♀
3	"	"
4	"	"
5	Mallard	♂
6	Pintail	"
7	"	"
8	"	"
9	"	"
25	"	♀
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Oct. 17

- Raven
- Crow
- Night Hawk
- Marsh Wren
- Song Sparrow
- Western Gull
- Redwing
- Pintail
- Green-winged Teal
- Mowitcher
- Mallard
- Sperm-bill
- Godwail
- Widgeon
- Cinnamon Teal
- Canvasback
- Redhead
- Canada Goose
- W. B. and P. sparrow
- Pectoral
- Ring-billed Gull
- Forster Tern
- Ruddy Duck
- P. Phalarope
- Downy Woodpecker
- Magpie
- Pipit

- ^HPartridge gambeli ~~112.6~~ 109
- Barn Swallow
- Goldfinch
- Song Sparrow
- Western Gull
- Ruby-crowned Kinglet
- Ring-billed Gull
- Belted
- Night Hawk
- Marsh Wren
- Cinnamon Teal
- Blue-bill
- Widgeon
- Godwail
- Crow
- Mallard
- Canvasback
- Redhead
- Sperm-bill
- Green-winged Teal
- Pintail
- Mowitcher
- Crow
- Red-billed Gull
- Killdeer
- Marsh Hawk
- Magpie
- Pipit
- Raven

Oct. 19

- Rock Wren
- Pine Siskin
- Ring billed Gull
- Marsh Wren
- Redwing
- House Finch
- Song Sparrow
- Western Gull
- Red billed "
- Nighthawk Chickadee
- Bittern
- Great Blue Heron
- Night Heron
- Horned Lark
- Magpie
- Pheasant
- Raven
- Robin

Oct 20

- Goshawk ~~102.6~~ 100.7 104.6
- Downy Woodpecker ~~104.6~~
- Avocet
- Mallard ~~105.1~~
- Pintail
- Green-winged Teal
- Hooded Merganser
- Wigeon
- Marsh Wren
- Redwing
- Great Blue Heron
- English Sparrow
- Marsh Hawk
- Magpie
- Raven
- Ring billed Gull
- Franklin Gull
- Night Heron
- Sparrow
- Greater Yellowlegs
- Coot
- House Wren
- Virginia Rail

D. L. Johnson
 North Branch, Oregon, the father
 of the modern Oregonian
 left for Oregon in 1842 and
 left 1 to Dec 21 except that
 the season closed on March 15
 in Washington, Rain, San Juan, Grand
 and United and in San Jose, Brazil,
 many, good, Washoe, down,
 mixed and good country there
 as a result of our success for
 the 15th or 16th.

in the
 migration to the Great Salt Lake
 No deep scars in new ones
 migration of dark green & brown for
 Melchior.

Head lost up
 Wrecked
 2nd weight

7 Jan 15
 Packed garters
 9-23
 Sewing machine #1
 9-24
 Run ahead East River

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Wash 60 Sperry
 Looking on for about 100 ft in one
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[Faint handwritten notes, possibly bleed-through from the reverse side.]

~~Handwritten text, possibly a signature or name, crossed out with a horizontal line.~~

~~Handwritten signature~~

[Faint, illegible handwriting]

~~1720-1721~~

Handwritten: Handwritten

1222-1223

1920

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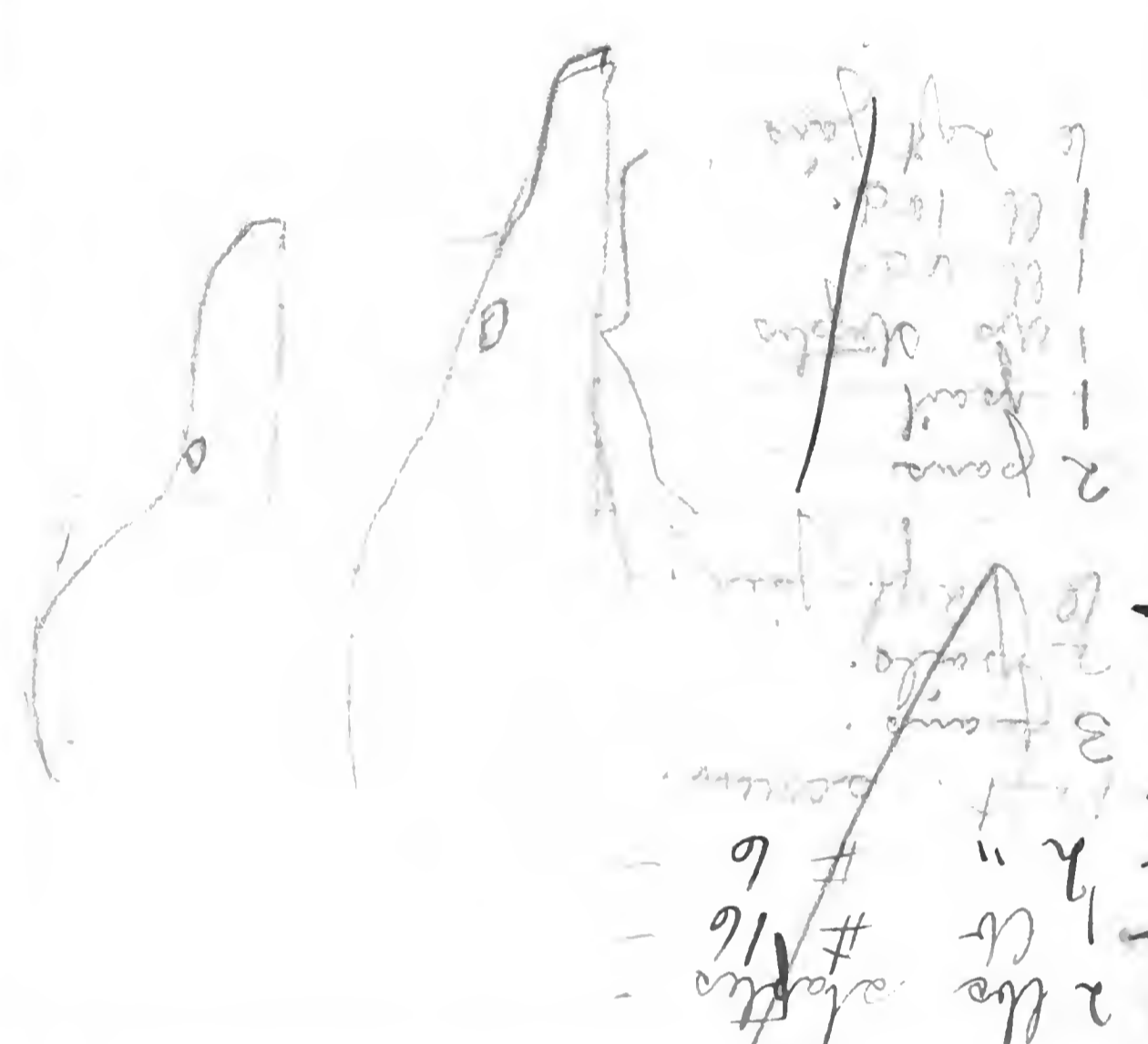
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Recd.
Aug. 18/1914

OFFICIAL BUSINESS.

DIVISION OF ACCOUNTS AND DISBURSEMENTS,

Washington, D. C.

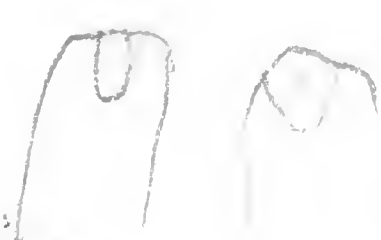
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DISBURSING CLERK,

U. S. Department of Agriculture,

8-833

WASHINGTON, D. C.





United States Department of Agriculture

FIELD DIARY

OF

Mr. Utah + California, Colo, Kans.

Oct. 22. Dec. 10. 1914.

(Official title.)

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Every officer or other employee of the Department of Agriculture conducting work while traveling will, so far as practicable, keep a diary in which will be recorded, under an appropriate date entry, a concise statement of all important matters pertaining to such work and also of any general matters that may be of interest to the Department.

This diary will be retained by the official preparing same, but will be subject to call by the administrative officers of the Department, including the disbursing officer, at any time.

When this book is filled another may be secured by application to the chief of your Bureau or to the disbursing officer of the Department.

James Wilson

Secretary of Agriculture.

... 8' le mur on north Bay side canal height 5' 00
... 9' 6" on Pintail neck west side 15' 00

[Faint, mostly illegible handwriting on the top page of the notebook, possibly containing a list or journal entries.]

718 but not found
 Ducks y... 1911 ...
 Aug 22 112. ... 61
 Aug 23. ... 5000 ...
 Aug 29 3250 ...
 Aug 31 9 men ...
 Sept 1 15 ...
 Sept 2 11 men ...
 Sept 3 several in North ...
 Sept 4 ...
 11 men ...
 " 5 13 " ...
 " 6 11 ...
 " 7 ...
 " 8 6 men ...
 " 9 ...

Sept. 10	6	men bet. Kendall's Bay & Inupiat Pt.	1384
" 11	6	" in east Pass.	993
" 12	6	" bet. Mud Point & Davis Id.	1540
" 13	6	" from Browne Overflow & East	850
most of them old birds. Clear for some time			
Sept. 14	7	" Kendall's Bay to Long Point	900
" 15	7	" Mud Point to head of Id.	2340
" 16	8	" #3 to Skene's Id.	1465
" 17	5	" East end of No Bay to Sparrow Id.	545
" 18	6	" Browne Overflow to Kendall's Bay	577
" 19	4	" Kendall's Bay & Inupiat Pt.	250
" 20	2	" East end of Bay & Kendall's Bay	368
" 21	2	" Kendall's Bay to Inupiat Pt.	260

no assistance from state in 1912

1909 shooting fine plenty of water
could have killed 200000
through season

1913 total about 12000

on fall Denver averaged 108 & a fraction
for every day that he shot about
12000 for season.
another season average was 84

11 days of July 1913

" " E. H. Hulbert 612 49 miles

1913

few in August in dark night
Sept 4 Cook reported 1600 out of #3
when water had recently flooded the
flats.

Sept. 7	2	men Pintail nest	195
" 8	5	"	400
" 10	10	(3 men finished by 8 lat)	1750
" 11	"	"	2500
" 12	"	"	3540
" 13	"	"	2311
" 14	"	"	3100
" 15	"	"	3417
" 16	"	"	3380
" 18	"	" in east end of North Bay	800
" 19	"	"	3270
" 20	"	"	4000
" 21	"	"	2180
" 22	"	"	3000
" 23	"	"	6000
" 24	"	"	4000
" 25	"	"	2080
" 26	"	"	1700
			<u>45,323</u>

Oct 22

- Killdeer
- Puffin
- Cuckoo
- Widgeon
- Gadwall
- Gallinule P.
- Pintail
- Common Golden Plover
- Redhead
- Redwing
- Song Sparrow
- Bunting
- Night Heron
- Rose & Snow goose
- Lesser "
- Canada goose
- Avocet
- Marsh Wren
- Magpie
- Hawk

Oct 23

- Night Heron
- Magpie
- Great Blue Heron
- Common Golden Plover
- Hooded Merganser
- Greater Scaup Duck
- Redwing
- Marsh Hawk
- Pintail
- Thrasher
- Snowy Heron
- Redhead

Benson reports lower water
 conditions than year ago, and
 a lake for me at 8 am on 11/24.
 25,000 birds at Silver Lake.
 That bird is a long one. The little
 of them.

1736 killed south of Hooper, Utah
 19/20/18. Hazel d. person
 Third Creek between Hooper
 Warren.

Abel Harry Finch
 20 Grand South
 Salt Lake City.

Oct 24 New State

- | | |
|---------------------|----------------------|
| - Avocet | - Raven |
| - Coot | - greater yellowlegs |
| - Grebe | - Bullfinch |
| - Flicker | - Ring billed gull |
| - Goldfinch | - English Sparrow |
| - Yellowbird | |
| - Redhead | |
| - Hooded Merganser | |
| - Peewee | |
| - Junco | |
| - Ruddy Duck | |
| - Eg. ad. all | |
| - Green and Gold | |
| - Lesser Snow Goose | |
| - Gadwall | |
| - Marsh Wren | |
| - Marsh Hawk | |
| - Longspur | clear, W.W. |
| - Redpoll | wind cool |
| - Virginia Rail | heavy wind |
| - Song Sparrow | last night |

Benson reports lower water
 conditions last year. The
 water is now at 100 ft. level.
 It is still about at same level.
 But just a long narrow. Probably
 a little.

1736 killed south of Hooper, Utah
 9/29/14
 18. Hazel Dixon
 Third Creek between Hooper
 Warren,

Running water. Little Mack
 Water in pool away from channel
 water.

Water in channels fairly high, flowing
 rapidly. much lower than at previous
 visits. appeared fresh.
 air clear no snow except about
 Salt Lake.

Telegram

On account of season
 sick duck have disappeared.
 wishes for you to come. Will write
 full particulars.

If water good to factories why
 do not grow domestic birds. The
 water is good for some days. It
 is good for the birds.

Oct. 27. Weber

- Goldfinch
- King Sparrow
- Maypole
- ~~Star~~ Finch
- L. oriole
- Crow
- Snow goose
- Mallard
- Pintail
- Green-winged Teal
- Gadwall
- P. oriole
- Redwing
- Pipit
- Horned Lark
- Killdeer
- Ring-billed gull.

Justin H. Farmer
have sent birds to you or go

Perhaps birds to you or go
sent out there in beyond places
for you

Nov. 1

- English Sparrow
- House Wren
- House Song Sparrow
- Ruby crowned Kinglet
- Chestnut backed Chickadee
- Spurred Towhee
- Ruby Bush Tit
- Audubon's Warbler
- Black & white
- Fox Sparrow
- Nuthatch


Mr. J. S. Hunter Room 734 Mills
Mr. E. Schaeffle Bldg. San Fran.

Met Sargent at Calif Academy.

rooms not in.
in collection skins. examined geospiza
other coccyzus like geospiza but
with long slender bill showing
more immature.

Mr. J. S. Hunter knew Cary, was in
Galapagos. spoke of trouble with
Gilbert Stewart who was a shark.

yesterday examined collection
of Calif Acad. large series finely
prepared water birds. Cases like 1/4 unit
Nat. Mus. Had a different catch.

 hinge
rust flut. raise out & up to open
one at each end of case.
great series of giant tortoise, Van
Sumburg's report just out.

20,000 sick & dead ducks
reported by A. E. Schmitt. Vice pres
Horn Co. Lands & Devt. company. tried
to see this gentleman but found he was
in Hanford.

Hyson Matthews
Wasco
Calif.

gull - when momentum checked, feet
were lowered until new momentum was
gained through wing motion.

Tracy & Storrs
Berkeley
Calif

% Mrs. Vert. Zool

Lee Dice

ditto.

—
—
—

- Mourning Dove
- Buzzard
- Mocking bird
- Meadowlark
- Thrush
- W. Redtail
- Say's Oriole
- Coot
- Ruddy
- Great Blue Heron
- Herring Gull
- Sandhill Crane
- Song Sparrow
- Marsh Wren
- Horned Lark
- Pintail
- Spoonbill
- Least Sandpiper
- W. Sandpiper
- Plover
- Canada Goose
- Hooded Merganser
- Killdeer
- Cinnamon Teal
- Swamp Sparrow
- Marsh Hawk
- Spotted Towhee
- Sharp-shin
- House Finch
- Audubon Warbler
- Lark Sparrow
- Towhee

Shad
Aval
W. Gull
Sail
Coot
Pintail

Pintail & helpless - which
fences - eye -
another eye - but at night
so that the bird was entirely
blind.

The birds saw from you
able to stand. And as the
black birds wings hang loose
from sides - birds in the bath
for - not - when approached the
birds' backs go - about as
the birds attempt to rise off
but in many cases the birds is
helpless - Tail can be moved.

- Another - helpless - 3 were able
to run rapidly but could not fly.

They seemed a light current
sitting - water - probably
influenced by north wind which
Bottles which I wanted fairly firm
and was a day - for the
day - water - slightly
saline with alkaline soap
fragrant in color - foul smelling
bubbles arose in places -

High of by the and a light
was taken in water.

Temp. of lake - children of

all day long } and very warm,
 have now been steadily closed
 back since the winter is now
 receded. It is twenty miles in
 the river and on this northern
 end. The river is now five
 miles wide & as fast as the
 land is being it is fast much
 cultivating & mainly coffee land
 all day. The water is being
 steadily pumped out for irrigation
 leading to lower water level. In
 addition the river has been
 diverted to the westward so that it
 now flows into the sea & as a result
 the river is now dry & the lake
 was entirely dry & now boats can
 only pass in channels left in the
 bottom fields, was greatly
 reduced last year but winter
 rains helped fill it.

Round Rocks

- 5
- Audubon's Warbler
 - House Finch
 - Meadowlark
 - Flicker
 - Morning Dove
 - Shrike
 - Sparrowhawk
 - Mockingbird
 - Ring Sparrow
 - Chipping Sparrow
 - House Finch
 - Cuckoo
 - Brown Towhee
 - Marsh Hawk
 - Fox
 - Ruddy winter, spindled up to
 - Cuckoo
 - Sparrowhawk
 - Great Blue Heron
 - Song Sparrow
 - Red backed Sapsucker winter
 - Green winged Teal
 - Pintail
 - Fox
 - Canada Goose
 - Least Bittern
 - Canada Goose
 - Swan
 - Marsh Wren 100.3
 - Song Sparrow 107.6
 - Snow Goose
- No. 2

Cost 111
Widowson

Pintail 1. Blood smear from
abdominal cavity. No sign of nematodes
and no smear from heart. No nematodes
found in either of them. Brown & watery
large signs of myxomatosis.

Large oval fat. Intestine contained
gravel & few broken feathers.

Intestine from hardwired specimen.
lumen of canal with capillaries
of villi sub-gut distributed.

Pintail 2. Bird frequently voided
gas. could catch back of
feathers about anus stained
green by fecal matter. Bird
very fat.

examined blood smear from
side of breast. no sign of nematodes.
Another taken from left ventricle
no sign of nematodes.
duodenal loop of intestine
with lumen intensely irritated
below gut almost normal.

gummed trap made. Bird
not noticeably fat. fairly able to
hold trap up. Blood smear
examined from heart. no sign
of nematodes.
Intestine firm rigid empty
same for myxoma. villi with
distributed capillaries.

Split female. Bird 1.8. noted
that it flew peculiarly. Bird
found that it was from bathing
that firmness of tail was
stiff & forward. Bird acted
odd & quiet & rather dopy
found that the abdominal
crops containing myxoma &
had distributed capillaries.
myxoma out in tubes into the lumen
stomach contained 5 few
mixed myxoma.
affected

- Meadowlark
- 8 birds
- Mockingbird
- Flicker
- Crow
- Kingbird
- 8 yellowthroats
- Crow
- Crows
- Ruby crowned Kinglet
- Carolina Wren
- House Finch
- 4 orange throats
- Horned Lark $+08.6$
- Pine Siskin
- ~~Brown Blackbird $+06.1$, $+08.1$, $+08.6$~~
- Day Phoebe
- Salt Hill Crane
- Pipit
- Arctic Skua
- Least Sandpiper
- 3 Wt. duck
- Mallard duck
- 11 Wt. duck

85.7 hummer

45.7 Starlings

King's River. Maps show me
circuit. Vastly different.
South across foot of hills
enormous in fact. Hills
in soil.

Long Point on Lake.

End on Crown

Lake 11 miles square 1 mile.

Lake 6x8 another year.

More shells deposited on Crown

Rick was 5 and 1/2 ft

3 dead shells

Spring 350 day.

Shrimp grown

Drink 28 minutes

Horned Lark 22

[illegible]

2 miles

252 yds.

[Faint handwritten notes and tally marks at the bottom of the page.]

[Faint handwritten notes, possibly describing anatomical structures or measurements.]

10.

~~Patrol~~ ~~XXXXXX~~

- Swift
- Mockingbird
- Meadowlark
- Horned Lark
- Crow
- P. quail
- quail
- Great Blue Heron
- Herring Gull 106.10
- Sharp-shinned Hawk
- Sparrowhawk
- Rail - 104.2
- Redwing 103
- Brown Blackbird
- Towhee
- Cowbird
- Mountain Plover 106.8 and 104.3
- Ring-necked Pheasant 106.6
- C. g. b. 1103.8

Ground 3 ft. again
 long patches cut off with
 leaved - many growth
 narrow
 of the lake from 28 miles from
 2 km.

another section in sight with
 at least 2 lakes to be seen.

6 miles in South Side
 from town.

Horned Lark 28 miles.
 Plover 26
 Plover 30

Very fat birds affected by
 heat & the full moon
 perhaps all pass when
 flat dry & no water
 present when they can
 find any.

From here boat yard as off

Printed ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ 57
 Salt ~~|||||~~ 1
 Black ~~|||||~~ 1
 Seal ~~|||||~~ 1
 Water yellow ~~|||||~~ 1
 Horned ~~|||||~~ 1

2nd 100 yards
 Printed ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ 67
 Spombill ~~|||||~~ 3
 Seal ~~|||||~~ 1
 Salt ~~|||||~~ 1
 Arrow ~~|||||~~ 1
 Horned ~~|||||~~ 1

3rd 100 yards
 Printed ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ ~~|||||~~ 70
 Seal ~~|||||~~ 1
 Salt ~~|||||~~ 1
 Black ~~|||||~~ 1
 Spombill ~~|||||~~ 1

This window is intended for
 a mile west. Same as before
 as was printed a mile east
 yesterday

12.3
 70
 67
 52
 3121 1/3
 7 1/3
 3121 1/3
 7 1/3
 201.2
 17
 71402
 57.5
 241
 31
 17
 241
 3769.9 2
 3770
 6400
 10170
 3200
 6400
 10.170
 7213900
 71
 64
 5.6
 7.4
 52.5
 51.5
 52.5
 66.5
 61.1
 52.5
 61.1
 52.8
 52.8
 52.8
 3226.8
 65.8
 422.4
 2640
 3168
 3474.24
 51
 73.1
 10
 3226
 3770
 323
 577
 3770
 3474
 275
 1615
 1885
 323
 577

East Snowy plover soil sandy
many mounds.
Horned Lark 23 miles

Old Swan Lake sloughs
East of East Hills

3 Horned Larks made 24 miles

Half road from old
camp. great amount of
Thomomys signs. country
slightly broken up.

J. R. Estrom
J. R. Estrom
D. Y.

- 9.
- Shrike
 - Meadowlark
 - Willow Goldfinch 1006
 - Sparrowhawk
 - Raven
 - Savanna Sparrow
 - Red-tailed Hawk
 - Horned Lark
 - Song Sparrow
 - Indigo Bunting 1062
 - Intermediate Sparrow
 - Sharp-shinned Hawk
 - Lark Sparrow
 - Black Phoebe 1097, 110, 1066
 - Yellow 1084, 1066, 1057
 - Song Phoebe
 - Cormorant
 - Coot
 - Snow goose
 - Canada "
 - Pintail
 - Great Blue Heron
 - Heron
 - Marsh Hawk
 - Redwing
 - White Bluebird
 - Mockingbird 1017
 - Kingbird
 - Monarch
 - Pine-lined junco

From Lakeport, Aug.
 Bremita broad sheet, 24 in.
 growing. Water greenish blue.
 (Lakeport, Aug.)
 (Mildred by Lakeport, Aug.)
 Some surface below of
 water high takes from can
 last.

Palmer del in lake. $1\frac{1}{2}$ ac.
Milling reservoir
washed flat around by lake
within 100 ft of lake.

within 4-5 miles
of the mouth of the
river. The water is
very shallow, dark
green. No water coming
out now.

turned south along Elk hill.
rounded hills 100 to 150 feet
high covered by grass and
sage.

Much marking with arrows
out the doors of tubes & marked
in lake.

in lake
of lake - turned down right on border

10

- Audubon Warbler
- Sparrowhawk
- Downy Woodpecker
- Red-tailed Hawk
- Horned Lark
- Meadowlark
- Raven
- Snowbird
- White-throated Bluebird
- Flicker
- House Wren
- ~~Titmouse +08.6 -100.6~~
- Chestnut-backed Bluebird ~~+07.6~~
- Junco
- Fox Sparrows
- House Finch
- Goldfinch ~~+07.6~~
- Gold Pheasant-like ————
- Bewick's Wren
- Cowbird
- Starling
- Mallard
- Turkey Vulture
- Kingbird
- Hooded Merganser
- Song Sparrow
- Bay Breasted
- Gulf Chipping Woodpecker ~~+08.7~~
- Indigo Bunting
- Black Wren
- Prairie Falcon

Sparrowhawk made 22 miles
from same station.

Thorn of old from 1st. made 16 miles
Sparrowhawk made 11 miles toward
mountain.

Sparrowhawk made 25 miles
Redtail flying eagle made 22
eagles. Sparrowhawk made 22 miles
up to 2000 ft.

Lake Cagac, water
mineralized

Rain made 24 miles
Horned lark made 24 miles

Broad valley of old stream along back
of mountain to 1000 ft.
Show some sedimentary rocks, volcanic
ash layers, outcrops of lava.
Old valley of old stream.
Iron pyrites 500 ft. below mouth
of river. Sparrowhawk common
Horned lark common

- Mojave
- House Finch 1000
 - Canyon wren
 - Lark
 - Pileated

Iron pyrites along back.
Thorn of old from 1st. made 16 miles
Sparrowhawk made 11 miles toward
mountain.

Water swimming north head under
water. Also used water to
water. Saline strong with borax
Rovet 1
Every thing preserved. Found
Spondill ~~111~~

Two Brownell 2 yr old. Eggs
+ Wells had looking in

Brown. Back median line
stripes in front of shoulders running
down mid median line. House
very badly colored. Very young to
black. Some marked with
black bars across front of egg above
femur, dark black across light
center of head etc.
Young very woolly almost
faint color with markings
light chestnut brown,
then with vanded legs below
thence

Thin line
 10 to 12 inches of snow
 level
 (has cluster where I
 found some of them
 below surface in loose earth
 in open field)

Small dunes 10 to 30 feet across
 at intervals

16 feet on bank got snow & dunes
 below.

52 inches of evaporation on lake yearly.
 Birds die in February & March
 water high when snow comes down
 lake level now about average.

- 15 Lakes
- Marsh Hawk
 - Pipit
 - Meadowlark
 - Coot
 - English Sparrow
 - Chipping Sparrow
 - Song Sparrow
 - Marsh Wren
 - Spurred Towhee
 - Flicker
 - Great Blue Heron
 - Night Heron
 - Merganser
 - Pheasant
 - Duck
 - Goose
 - Canada Goose
 - Red-tailed Hawk
 - Horned Lark
 - Killdeer
 - Woodcock
 - Golden Warbler
 - Jay
 - Crow

- 1st
- 2nd
- 3rd
- 4th
- 5th
- 6th
- 7th
- 8th
- 9th
- 10th
- 11th
- 12th
- 13th
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- 93rd
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- 98th
- 99th
- 100th

An Oculaceus was & lives
 primarily fresh water. Probably
 by fishes & small reptiles
 & amphibians. But these
 found various river & fresh
 water. As they dried, the
 water became impregnated with
 salts gradually & through evaporation
 and these animals gradually
 were accustomed to the changes
 in conditions and continued to
 flourish. Cycles of dry & wet
 periods undoubtedly occurred.
 In dry periods the streams
 would be greatly reduced and
 the mineral content of the
 water with high evaporation
 greatly increased so that
 larger numbers of the surviving
 fishes & other animals perished
 from an excess of water.
 The interesting point was that
 the Waterbats of Great Britain
 & America & India to day
 and many other parts of
 the world are found in ponds.
 It is not clear that migration
 is not a very marked feature
 until after the glacial period.
 But if we regard it as Pleistocene
 in origin and post Pleistocene
 in development, so that birds
 & mammals in early waters did
 not come down to winter in the lakes.

However there was undoubtedly
much water during a season of
flood in the period of extensive drainage
of the water beyond to develop this.

having low water
swamps up valley leaving broad
pening to east through which
lake formerly extended. As far
as Chalfont deposits of salt &
soda showed as entering the
ground. Above here was a
sand flat. ground with
grass and shrubs.

Above here there was a
sudden appearance of rock &
ground a the small island.
In a mile or 2 further the
two bunches land had swung
together in a gradual curve
making the old northern shore
line. This occurred about 2
miles below the
elevation at lower rd. Station 415.
B.M. at channel 4598.

8 miles north of channel

~~Amphiprion Sod. all~~
~~above~~

Wadeville at 2 hours - Confined
by steep banks with
shrubbery and small trees. Road
is a dirt track. The banks are
loose very brown. There is
a small stream in the middle
of the road and a small
pond at the end. The road
is very rough and the
Maggie!

31 Crow
2 P. Wren
1 Mag. P.
1 Mag. Towhee
2 Flicker

for my

~~Amphispiza Sodanalli~~
~~Prater's~~

Hedlie DeReimer Darrow

Huntington - New Wild Forty Wades.

Ed himmash 65 supposed supplies
 brought in from 7 can't find record
 Charles S. Allen - no record
 known to him.
 Fred Alfred - dolls
 to M. Ballin - little said that
 cripples reported by himmash had run
 shot/saturday men shooting around
 lake these men took a boat
 cleaned up there that fell in water

Was told that paleontological
 work in side birds had been done
 by Dr. Kemp who is no longer here
 He kept very good notes so that
 they would all be in record.
 Burnett had seen record of
 six birds - all in at 11 May
 Mr. L. Gray deputy state
 warden had not heard of six
 birds. Had however noted decreasing
 birds with symptoms similar to
 those described for 40 years. Birds
 were found in small number to move
 usually when water was low.

22

- Crow
- Tree Sparrow
- Chickadee
- Downy Woodpecker
- English Sparrow
- Junco
- Tufted Titmouse
- Least Noddy
- Red-tail Hawk
- Meadowlark
- Gray. Gnatcatcher
- Blue Jay
- Flicker
- Blue Bird
- Red-shafted flicker
- Robins
- Rusty Black-bird

Nov - 26 - Chautauque, Wyoming

- Ind. sparrow
- crow
- Horned lark
- chickadee
- meadow lark
- blue-bird
- hairy-woodpecker
- vesper sparrow
- shrike
- red-shafted flicker
- Frieder's Hawk 105.8.

Nov. 30.

- Junco
- Montana Junco
- Chickadee
- Downy Woodpecker
- hairy "
- Flicker
- Crow
- Bluejay
- Redtail
- Tufted Tit
- Bluebird
- Cardinal
- Harris Sparrow
- Dove
- Red-bellied Woodpecker
- English Sparrow
- White breasted Nuthatch.
- Goldfinch
- Mourning Dove.

Dec. 2

108.4

- Crow

- Goldfinch

109.7

- Red bellied Woodpecker

109.4 109.4

- Hairy

- (Cormorant)

- Flicker

- Tree Sparrow

- House

109.6

- Robin

107.6

- Bluebird

- Tuffed Titmouse

- Chickadee

- Towhee

- Bluejay

- Purple Finch



Accepted by Robert Brown
 & paid at value here by

17-18 July 1968

Drinking the powder
up matters

61

Sam. P. 44

11

John

01

15-12

4

Barbara Voth

9

30 June 1964

7

11

— 7 —

11

5

7

81

Marchall - Practical Zoology
Indian, New York 1897.

But S. lichen
dwarfed in 1.5 degree
cold in 1 liter water

